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The object of this study is to treat pronominalization in Spanish within the framework of generative grammar. (The non-hypenated word "pronoun" refers to the traditional class of words including alguien, algo, el, or ella. The hypenated form, "pro-noun," refers to the underlying lexical entries or feature complexes which share the features [+pro, +noun].) The description here is limited to pronominalizations which can be traced to underlying strings of determiners and pro-nouns. The determiners are the definite and indefinite articles, the demonstratives, and the indefinite determiner, algun- 'some'. This study differs from that of Stockwell, Bowen and Martin principally in that the underlying forms upon which the processes of pronominalization act will be considered feature complexes occurring in the base strings of noun phrases (Chomsky, 1965). It is suggested, for example, that the pronoun, ella 'she', has an underlying pro-noun which combines the features of feminine gender, singular number, and humanness. The processes of pronominalization involve the deletion or retention of these underlying nominal feature complexes. The form, ella 'she', represents the retention of the feature complex indicated above, while the string, el bueno 'the good one', is the result of the deletion of a feature complex combining the specifications masculine gender and singular number. (Author/JD)

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PRO-FORMS IN THE SPANISH NOUN PHRASE

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JOHN EDWIN LACKSTROM

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1. INTRODUCTION

A grammar, whether of the traditional, structural, or generative type, is a set of rules whose function is to specify the class of grammatical sentences in a given language. In specifying this class, the grammar also defines, within its own framework, the major lexical categories of the language. The noun as a lexical class, for example, is defined in traditional and school grammars as 'the name of a person, place or thing.' Here the definition is semantically based. In structuralist descriptions such a definition may be either morphological or syntactic. The morphological definition of a noun in English may distinguish it from other classes, say the adjectives, in that it may be inflected for number. A syntactic definition often involves the use of some diagnostic testing frame and a statement as to whether a given form may occur in that frame. A noun in English, for instance, may occur in the frame, 'There is a black ______.' In a generative grammar the definition of lexical categories is accomplished only incidentally. A noun in such a grammar is a noun because it is so marked in the lexicon and because marking it in that way contributes to the simplicity and adequacy of the grammar. It may also turn out that some 'definition' may be provided in the metatheory, i.e. there may be some universal characteristics, such as having inherent features rather than contextual.

1.1 Traditional Approaches to Pronouns

In view of the various approaches of different grammatical models to the designation of lexical classes it is not surprising that the description of pro-forms has also been subject to a number of different definitions. In traditional terms the pro-form is the result of a process of replacement operating upon some lexical category (Sweet, 1900: 72). A pronoun is traditionally a form which may replace a noun. Spanish _él_ 'he' and _nadie_ 'no one' are, therefore, pronouns by virtue of their ability to replace a noun, e.g. _Juan_ 'John'. Consider:

(1) _Juan_ tiene un caballo.
'John has a horse.'

(2) El tiene un caballo.

'He has a horse.'

(3) Nadie tiene un caballo.

'no one has a horse.'

The same analysis can proceed through the major categories. Jespersen (1924: 83) suggests substitution forms for each major lexical class. A pro-verb is a form which may replace a verb as hacerlo 'to do it' replaces comer 'to eat' in the pair of sentences:

(4) Juan comió pero Pedro no lo hizo.

'John ate but Peter didn't do it.'

The difficulty here is that the definition does not strictly cover all of the forms which have been traditionally called pro-forms. The first person personal pronoun, yo 'I', has always been considered a pro-form but one may ask what yo replaces in the same sense that él 'he' replaces Juan 'John' or el hombre 'the man'.

Jespersen (1924: 82) proposes a classification of pro-forms in terms of their linguistic and non-linguistic reference. Pronouns like yo, tú, ella, and usted 'I, you, she, and you' are termed 'shifters' since their reference changes with the extra-linguistic context. The relative pronouns, que 'that' and quien 'who', fall into the class of representative and relational words since their reference depends upon the linguistic context.

A notional analysis of this sort falls under the same criticism that is levelled against traditional grammar in general. By basing its classifications upon meaning or reference a traditional grammar is setting up criteria about which it cannot speak clearly or explicitly. The pronoun, ella 'she', in the sentence,

(5) Ella me habló en la clase.
'She spoke to me in class.'

may shift its reference according to the extra-linguistic context. At one time it may refer to a teacher and at another time it may refer to one of the students. The form, la alumna 'the student(fem.)', is not a pronoun and yet it too may shift its reference with the extra-linguistic context in a way no different from the pronoun, ella . In the sentence,

(6) La alumna me habló en la clase.
'The student (fem.) spoke to me in class.'

the noun phrase, la alumna, may refer at one time to María 'Mary' or at another time to Juana 'Jane'. The notional definition of Jespersen's is much too inclusive.

The demonstratives in Spanish provide an interesting case in the discussion of pro-nouns since the same forms have been described sometimes as determiners and sometimes as pronouns. The Spanish demonstratives in the singular are represented in the following paradigm:

(7)	masculine	feminine
Proximal:	este	esta
Medial:	ese	esa
Distal:	aquel	aquella

The demonstratives distinguish three degrees of distance from the speaker. The proximal form is translated 'this'. The medial form is translated 'that'. The distal form has traditionally be rendered 'that yonder'. Eg.

(8) este libro 'this book'
(9) ese libro 'that book'
(10) aquel libro 'that book yonder'

The determiners agree in gender with the noun they precede:

(11) este libro 'this book (masc.)'
(12) esta casa 'this house (fem.)'

The forms are inflected for number. The paradigm of plural forms is:

(13)	masculine	feminine
Proximal:	estos	estas
Medial:	esos	esas
Distal:	aquellos	aquellas

The demonstratives agree with the noun they precede in number as well as in gender. E.g.

(14) estos libros 'these books'

(15) estas casas 'these houses'

In traditional treatments (Ramsey, 1956: 119), when the demonstrative determiners do not modify a noun, they are said to function as pronouns. E.g.

(16) este caballo y *aquél*
'this horse and that one yonder'

(17) esa escopeta de Ud. y *ésta* mía
'that gun of yours and this one of mine'

(18) ¿Quién es *ése*? 'Who is that (fellow)?'

Traditional grammar distinguishes the pronominal and adjectival functions of these forms solely on the basis of their syntactic environments. If the form occurs preceding a noun it is a determiner; without a noun it is a pronoun.

In addition to the demonstratives already cited there is a set of demonstrative forms which have traditionally been called 'neuter'. In Ramsey (1956: 63) we are told that while nouns have the two genders, masculine and feminine; certain pronouns, the demonstratives among them, have also 'neuter' gender. These forms are:

(19) Proximal: esto
Medial: eso
Distal: aquello

Since they never occur preceding a noun in a determiner or adjectival function they are classed as pronouns. They are normally considered to have no plural. Eg.

(20) Esto me agrada más.
'This pleases me more.'

(21) Eso no me parece factible.
'That doesn't seem feasible to me.'

(22) Aquello ya no sucede.
'That no longer happens.'

This treatment establishes a separate gender which is assigned to a very restricted number of pronominal forms and to no others.

1.2 Structural Approaches to Pronouns

A morphological approach to pro-forms in Spanish can be found in Hall (1945). The pronouns, in his view, constitute a class which is distinguished by being inflected for person, number, gender and animation.

1. There are three persons:
   1st: yo; 2nd: tú; 3rd: sí (reflexive)
2. There are two numbers:
   Singular: yo 'I'; tú 'you'
   Plural: nosotros 'we'; vosotros 'you'
3. There are two genders:
   Masculine (1gender): nosotros 'we';
   vosotros 'you'.
   Feminine (2 gender): nosotras 'we';
   vosotras 'you'.
4. There are three cases:
   Subject: yo 'I'; tú 'you'.
   Object of a preposition:
   mí 'me'; tí 'you'.
   Object of a verb: me 'me'; te 'you'.
5. There are two states of animation:
   Human: alguien 'someone'; nadie 'no one';
   quien 'who'.

Non-human: algo 'something'; nada 'nothing';
que 'that / which'

This approach can be criticized for failing to provide any general criterion for distinguishing the entire class of pro-forms from the non-pro-forms. The appeal to inflection for person is not satisfactory since person is not a consistent inflectional category among the pronouns. Alguien 'someone', for example, is not so inflected. An appeal to gender is not satisfactory either. The personal pronouns, yo 'I' and tú 'you', are not so inflected. Arguments of this sort can be advanced against any definition of syntactic categories in terms of morphological forms. Categorization in terms of the surface morphology is not likely to be satisfactory.

A syntactic apprach to pro-forms has been proposed by Harris (1957). Under this analysis a pro-form has the syntactic priviledges of co-occurrence of an entire class or sub-class of lexical items. Alguien 'someone' will be termed a pronoun since it has the same priviledges of occurrence as human nouns in Spanish. E.g.

(23) Juan habla español
'John speaks Spanish.'

(24) El hombre habla español.
'The man speaks Spanish.'

(25) La mujer habla español.
'The woman speaks Spanish.'

Alguien 'someone' may replace the human noun phrases in (23) - (25) giving in each case:

(26) Alguien habla español.
'Someone speaks Spanish.'

Consider the sentences:

(27) Juan habla español.
'John speaks Spanish.'

(28) Juan come la cena.
'John eats the meal.'

(29) Juan sale del hotel.
'John leaves the hotel.'

A pro-verb may replace each of the verb phrases in (27) - (29) giving in each case:

(30) Juan lo hace.
'John does it.'

On this basis, the phrase, lo hace '(someone) does it', may be said to be a pro-verb or a pro-verb phrase.

One difficulty with this analysis is that it relies too heavily upon the surface structure of the sentence and is therefore incapable of expressing the underlying similarity between noun phrases like a él 'him' and al bueno 'the good person' on the one hand, and phrases like lo 'it' and el bueno 'the good thing' on the other. Consider the sentences:

(31) María lo quiere a él.
'Mary loves him.'
(32) María quiere al bueno.
'Mary loves the good person.'
(33) María lo quiere.
'Mary wants it.'
(34) María quiere el bueno.
'Mary wants the good thing.'

A descriptively adequate grammar must show that the object noun phrases in sentences (31) and (32) both have underlying nouns which are marked for masculine gender and humanness. Similarly the nouns underlying the object noun phrases in (33) and (34) are marked for masculine gender but non-humanness.

In order to show the underlying similarity between (31) and (32) and between (33) and (34) it is necessary to appeal to some underlying structure.[1] This is not possible in Harris' model.

Lees (1960b: 209 - 10) has offered a more general criticism of the structural model for lexical classification. The structural model is based upon the notion that a rigorous scientific definition is properly derived only from a set of operations applied to raw data. Thus, a linguistic form can be called a 'noun' only if it appears in the same morphological or syntactic environments in which a noun occurs. This presupposes that there is a procedure for devising the diagnostic frames in which these forms are to be tested. Since none has been proposed the definition becomes circular. One must have some knowledge about the nature of a noun, i.e. the environments in which it occurs, before one can define it. Most important, this obscures the real test of the adequacy of a linguistic description. It contends that the adequate description is the one which deals only with raw data and not with 'intuitions' or 'guesses'. It evaluates the description on the basis of how the analyst proceeds in his experimentation. The real test of a linguistic description should be how well it explains a language in terms of the speaker's competence to create novel utterances.

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[1] Sentence (33) is ambiguous since, by the optional deletion of *a él* in (31), (33) and (31) become equivalent.

1.3 Generative Approaches to Pronouns

In transformational theory it is the grammar itself which provides the definition of lexical classes. A given number of forms are all said to be of the same class if they can all be traced back to the same node. Thus, mujer 'woman', traje 'suit', and casa 'house' are all 'nouns' in a generative grammar because they can all be traced back to the node, Noun, in the phrase structure component. No external operations upon observable linguistic strings are required. The justification for the inclusion of any word or morpheme in a given class is the ultimate adequacy and simplicity of the grammar.

It will be helpful to look at two possible treatments of pronouns within the framework of generative grammar. One of these treatments views the pronoun as an individual lexical item which is selected from the lexicon, just as a noun or a verb, and placed in the string generated by the base component. The other treatment views the pronoun as the result of a process operating upon a noun phrase. Both of these treatments seem inadequate for various reasons. Their consideration, however, will lead to modifications yielding greater descriptive adequacy.

1.3.1 If the first treatment is applied to the description of demonstratives in Spanish two separate sets of lexical entries must be established. There would be a set of demonstrative pronouns with inherent features of gender and animation. Consider, as an example, the medial demonstrative pronouns. The form, ese 'that', would be marked as a pronoun with inherent masculine gender. The form, esa 'that', a pronoun, would be marked with inherent feminine gender. These forms would show the gender distinction but not that of animation since they may refer to both animate and inanimate objects. Eg.

(35) Ese habla muy bien.
'That person speaks very well.'

(36) Yo busco ése.
'I'm looking for that thing.'

The form, eso 'that', on the other hand, shows the feature, [-animate] , but no feature for gender. It is normally used to refer to sentences. Eso me sorprendió. 'That surprised me.' may be expanded to Eso que Juan dijo me sorprendió. 'That which John said surprised me.' The use of the [-animate] form is not compatible with expressions of gender, e.g. *eso que es buena with the feminine adjective, buena. Nor is this form compatible with expressions of humanness, e.g. *eso que me conoció 'that thing that knew me' where the clause requires a human noun. The [-animate] forms are restricted to inanimate and gender-less reference.

The demonstrative determiners would be separate from these pronoun forms in the lexicon. They would acquire, unlike the pronouns, their features of number and gender from the nouns which they modify. They would be expressed in the lexicon as the three stems: est-, es-, and aquell-. Were this analysis to be used as part of a generative grammar the pronouns would replace matrices in the pre-terminal string which were marked '+' for noun. The determiner stems would replace matrices which contained the feature, [+determiner] . The effect of such an analysis would be to set up distinct classes of forms which would, for the most part, be identical and whose function as noun or as determiner would seem to be determinable by their occurrence with or without a following noun. The solution is uneconomical since at least four lexical entries would be required for each stem: one for each pronoun gender (masculine, feminine, and inanimate) and the stem for the determiner. The treatment, furthermore, fails to relate the determiner and the pronoun. The _esa_ in _Esa_ _me_ _alegra_. 'That one pleases me.' is described as totally different from the _esa_ in _Esa_ _canción_ _me_ _alegra_. 'That song pleases me.' By not relating these two forms the grammar fails to account for an intuitively important relationship in Spanish.

1.3.2 Both of the problems inherent in the first treatment can be remedied by viewing the pronoun as the result of a transformation operating upon a noun phrase consisting of a determiner and a noun. In this treatment there are given noun phrases which consist of a demonstrative + noun:

(37) a. est-$_{[+\text{det}]}$ mujer$_{[+\text{noun}]}$

b. es-$_{[+\text{det}]}$ hombre$_{[+\text{noun}]}$

c. aquell-$_{[+\text{det}]}$ libro$_{[+\text{noun}]}$

Pronominalization deletes the noun after the agreement rules have applied leaving the determiner as the sole constituent of the noun phrase. Eg.

(38) a. ésta

b. ése

c. aquél

In this treatment, as in the traditional approach of Ramsey, the problem of the 'neuter' demonstratives arises. Stockwell, Bowen, & Martin (1965) use essentially this model to describe the pronominalization of the demonstratives. The process involved is one of deletion. In order to account for the neuters they set up an underlying neuter noun (N_{neut})

which is automatically deleted thus pronominalizing the preceding demonstratives and giving the 'neuter' forms:

(39) est- N_{neut} --> esto 'this'
es- N_{neut} --> eso 'that'
aquell- N_{neut} --> aquello 'that yonder'
(Stockwell, Bowen, & Martin, 1965: 73, 78 & 101)

In order to account for these forms Stockwell, Bowen & Martin, like Ramsey, have had to assign the contrast between *aquel* / *aquello* to a distinction in gender. But Stockwell, Bowen & Martin shift the three-fold gender distinction from pronouns to nouns. Like Ramsey (1956) they are able to account for the gacts but only at the cost of setting up an ad hoc gender category in the language whose only function is to account for their 'neuter' pronouns.

Stockwell, Bowen & Martin go one step beyond Ramsey in that they extend plurality to the 'neuter' forms. This is done simply by allowing the neuter noun to be pluralized. Eg.

(40) est- $N_{neut-pl}$ --> estos 'these'
es- $N_{neut-pl}$ --> esos 'those'

aquell- $N_{neut-pl}$ --→ aquellos

'those yonder'

The effect of this rule is to create structural ambiguity since these forms are homophonous with the masculine plural forms. There is no evidence that this structural ambiguity exists. On the contrary, there is evidence that the 'neuter' forms do not extend into the plural. Consider the sentence:

(41) Juan me dijo que estaba cansado.

'John told me he was tired.'

It may be paraphrased by a sentence employing the 'neuter' pronoun in place of the included sentence:

(42) Juan me dijo eso.

'John told me that.'

The masculine of the demonstrative is not acceptable here:

(43) *Juan me dijo ése.

Now consider a similar sentence only this time with two included sentences in coordination:

(44) Juan me dijo que estaba cansado y que quería salir.'

'John told me he was tired and he wanted to leave.'

In employing a demonstrative to replace this coordinate clause one might expect the plural of the 'neuter' pronoun. No such form is possible. The singular is used:

(45) Juan me dijo eso.
'John told me that.'

A plural form is not acceptable:

(46) *Juan me dijo esos.

Apart from the problem of the 'neuters', this view of pronominalization is able to surmount the difficulties inherent in a treatment in which pronouns and determiners are treated as separate lexical items. The fact is that there is only one class of demonstratives in the language - these are the determiners. The base component of the grammar generates strings containing demonstratives followed by nouns. When the nouns are deleted the determiners do not become nouns; they remain only determiners. This view of pronominalization clarifies the relationship between the determiner form and its 'pronominal' counterpart - they are, in fact, identical.

Unfortunately, for all of the problems which this last treatment solves, it leads to an altogether new one. The forms, éste, ése, and aquél, as they are derived above, are each structurally ambiguous as many ways as there are nouns which can occur following each in the pre-terminal string. The pronoun, ésta, will be generated by the grammar, for example, as many times as there are nouns of the feminine gender in the lexicon. This is not a descriptively adequate solution since it accords to the pronominal forms a degree of structural ambiguity which is inconsistent with the intuition of the native Spanish speaker.

Recapitulating so far then, traditional and structural attempts to define and describe pro-forms all fail to specify the class in question. This is not surprising since these attempts have concentrated upon the surface structure only. It seems, then, that a generative treatment, which deals in underlying forms and processes operating upon these forms, may better be able to provide a descriptively adequate solution to the problem. The generative treatments which this study has so far examined have also been inadequate. In the first treatment the similarity between the determiner demonstratives and their pronoun counterparts was not recognized. In the other treatment this similarity was expressed but at the cost of descriptive adequacy.

The object of this study will be to treat pronominalization in Spanish within the framework of generative grammar. The description will be limited to pronominalizations which can be traced to underlying strings of determiners and pro-nouns. The determiners are the definite and indefinite articles, the demonstratives, and the indefinite determiner, algun- 'some'. This study will differ from that of Stockwell, Bowen & Martin principally in that the underlying forms upon which the processes of pronominalization act will be considered feature complexes occurring in the base strings of noun phrases. (Chomsky, 1965) It will be suggested, for example, that the pronoun, ella 'she', has an underlying pronoun which combines the features of feminine gender, singular number, and humanness. The processes of pronominalization will involve the deletion or retention of these underlying nominal feature complexes. The form, ella 'she', represents the retention of the feature complex indicated above. The string, el bueno 'the good one', is the result of the deletion of a feature complex combining the specifications: masculine gender and singular number.[2]

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[2] Throughout this study, the following convention will be observed. The non-hyphenated word, pronoun, will refer to the traditional class of words: alguien, algo, él or ella. The hyphenated, pro-noun, will refer to the underlying lexical entries or feature complexes which share the features: [+pro, +noun] .

2. THE PRO-NOUN

2.1 Recoverability

Although the second treatment of the Spanish demonstratives (§ 1.3.2) was found to be inadequate because it assigned to the pronominalized forms too much ambiguity, the process which it describes, noun deletion, seems to be intuitively correct. The difficulty involved in the treatment may be overcome by requiring that the deletions take place only if the form deleted is only one of a given set which will be called pro-forms (Katz & Postal, 1964: 80 - 120). The positing of pro-forms as lexical entries in a theory of grammar is a consequence of the requirement that a descriptively adequate grammar have recoverability of structure. Consider the relative clause in Spanish. Given the sentence:

(1) La mujer que es bonita baila aquí.
'The woman who is beautiful dances here.'

The relative pronoun, que 'that', refers to the subject of the sentence, la mujer 'the woman', but not to any arbitrary noun phrase. The descriptively adequate grammar describes this fact by saying that two sentences underlie the compound sentence, (1):

(2) La mujer baila aquí.
'The woman dances here.'

(3) La mujer es bonita.
'The woman is beautiful.'

These two sentences may be compounded in this manner only if they share identical noun phrases. The relative pronoun, que, may replace a noun phrase only if that noun phrase is found also in the matrix sentence. The conditions placed upon the two sentences which may form (1) insure that the derived sentence is unambiguous with respect to the noun phrase which is replaced by the relative pronoun.

This example may be carried one step further to illustrate a second aspect of recoverability of structure within a generative grammar. Consider the rules which govern noun modification in Spanish. The noun phrase, la mujer que es bonita 'the woman who is beautiful', is a paraphrase of the noun phrase, la mujer bonita 'the beautiful woman'. The descriptively adequate grammar describes this by saying that for every noun phrase of the form: det. N. que ser Adj., there is a synonymous noun phrase: *det*. *N*. *Adj*.,i.e. *que* *ser* --> *Ø* , in given contexts. Notice that it is possible here, as in the former example, to reconstruct the input noun phrases. For every *det*. *N*. *Adj*. string which has undergone this transformation there is a string *det*. *N*. *que* *ser* *Adj*. In the first example recoverability was possible because the noun phrase which was deleted was identical to another noun phrase in the same sentence string. In the second example recoverability was insured by the fact that the forms deleted from the sentence string were specifically mentioned in the structural index of the deletion rule. Recoverability allows the unique determination of the underlying strings given the output. The general linguistic theory requires that recoverability be a feature of a descriptively adequate grammar.

If n-number of input strings are reconstructible from the output of a transformation; then the output string is judged to be n-ways ambiguous. Consider the string: *la* *denuncia* *del* *abogado* 'the denunciation of the lawyer'. It is ambiguous in that it is a nominalization of either of two underlying strings.

This string may be derived from El abogado denuncia a alguien. 'The lawyer denounces someone.', where el abogado 'the lawyer' is the subject of the verb denuncia 'denounces'. The same string may also be derived from the sentence: Alguien denuncia al abogado. 'Someone denounces the lawyer.', where, in this sentence, el abogado 'the lawyer' is the object of the verb denuncia 'denounces'.

With this in mind consider the noun phrases:

(4) la bella 'the beautiful one'

(5) el bueno 'the good one'

In order to achieve descriptive adequacy (4) and (5) must be derived by deleting the noun from their respective underlying strings: la Noun bella; el Noun bueno. At the same time it is not the case that these strings are structurally ambiguous. Therefore, they must be uniquely derived from single underlying strings. It was shown above that the effect of deleting any arbitrary noun in this context assigns too much ambiguity to the derived string. To derive (4) from strings containing any arbitrary noun, eg.

(6) la mujer bella 'the beautiful woman'

(7) la casa bella 'the beautiful house'

(8) la gallina bella 'the beautiful chicken'
would imply that (4) is structurally ambiguous m-ways where m is the number of feminine nouns in the language. This is certainly not the case. Since (4) and (5) are not ambiguous it must be that the rule which deletes nouns in these contexts operates only upon specified nouns and only one noun in each context. In the present study these specified nouns shall be called pro-nouns.

It seems that pro-nouns need not be actually occurring words in the language. In order to preserve recoverability and prevent excessive ambiguity the pro-noun which underlies (4) must have only the syntactic feature [2 gender] (i.e. feminine) and no other inherent feature. Similarly, the pro-noun which underlies (5) must have only the feature [1 gender] (i.e. masculine) and no other such feature. In strings like (4) and (5) the only features which the underlying pro-nouns may have are the features of gender. If the features of humanness were to be included in the specifications of such pro-nouns each of the two strings would be two ways ambiguous. The noun phrase, (4), could be derived equally well from an underlying string containing a [+human] pro-noun or a [-human] pro-noun. The grammar would produce (4) and (5) twice. Such an anlysis would not be descriptively adequate. Now, there is no noun in Spanish which has only a gender feature and no other; therefore, it would be unreasonable to require that pro-nouns be actually occurring independent forms in the terminal strings of the language. This notion conforms to the observation that there is only an indirect and highly abstract relationship between the underlying structures of a language and its terminal strings.

2.2 Base Component Rules

The distinction between nouns and pro-nouns is introduced and defined syntactically in the base component of the grammar. For the purposes of this study the following simplified set of phrase structure rules is assumed:

(9) i. S --> NP⁀Predicate-Phrase

ii. Predicate-Phrase --> Aux⁀VP (Place) (Time)

iii. $$\text{VP} \dashrightarrow \left\{ \begin{array}{l} \text{Copula}^\frown\text{Adjective} \\ \text{Vb}^\frown \left\{ \begin{array}{c} \text{(NP)} \\ \text{S'} \end{array} \right\} \end{array} \right\}$$

iv. NP --> (Det) N (S')

Rule (9 i) describes the sentence in Spanish as a concatenation of two elements: a noun phrase and a predicate-phrase. The sentence, Juan habla. 'John speaks.', consists of these two elements.

In rule (9 ii) the predicate-phrase is expanded to include two obligatory elements: an auxiliary and a verb phrase; plus two optional elements: an adverb of place and an adverb of time. The predicate-phrase, habla 'speaks', is viewed as the terminal representation of an underlying auxiliary (in this case the present tense) and a verb phrase (here only the verb stem, *habl*-). The predicate-phrase may be expanded to include a place adverb: *aquí* 'here', and a time adverb: *a las dos* 'at two o'clock'.

(10) Juan habla aquí a las dos.
'John speaks here at two o'clock.'

Rule (9 iii) analyzes the verb phrase by indicating its possible components. One possible verb phrase is the copula plus adjective: *es bueno* 'is good' as in *Juan es bueno*. 'John is good.' Other possible verb phrases are:

Verb: *habla* e.g. Juan *habla*. 'John speaks.'

Verb and noun phrase: *compra el auto*
e.g. Juan *compra el auto*. 'John buys the car.'

Verb and sentence: *cree* # *los autos son buenos* #
e.g. Juan *cree que los autos son buenos*.
'John believes that the cars are good.'

Rule (9 iv) expands the noun phrase into an optional determiner followed by a noun which is in turn followed by an optionally included sentence. E.g.

Noun: *Juan* 'John'

Determiner + noun: *el auto* 'the automobile'

Determiner + noun + sentence:

el auto # *el auto lleva a los niños* #

e.g. *el auto que lleva a los niños*

'the car that carries the children'

There is a sub-component of the base which provides the strict sub-categorization of lexical categories according to their local context. Consider the rules:

(11) i. Vb --> [+verb, C.S.]

ii. N --> [+noun, 1/2 number, C.S.]

Rule (11 i) assigns to each verb the syntactic feature, [+verb] . The notation, C.S. (complex symbol), assigns by convention to the verb the categorial context within the domain of the immediately dominating node. Thus, by rule (9 iii), the possible contexts which may be assigned to the verb are:

+_______NP

+_______S'

+_______

The notation, +_______, indicates that the verb occurs alone in the verb phrase.

Rule (11 ii) assigns to a noun the feature,[+noun] , and a number feature, [1 number] (singular) or

[2 number] (plural). The notation, C.S., assigns to the noun the categorial environment within its immediately dominating node. By rule (9 iv) these contexts are:

+Det_____

+________S'

+________

The notation, +__________, indicates that the noun in question occurs with neither a determiner nor an included sentence.

The determiner is expanded in terms of category symbols and features. Consider the rules:

(12) i.

$$\text{Det} \dashrightarrow \left\{\begin{array}{l}\text{demonstrative}\\ \text{article}\\ \text{indefinite}\end{array}\right\}$$

ii. demonstrative --> [+dem, +def]

iii. article --> [+art, +/- def]

iv. indefinite --> [+indef, -def]

Rule (12 i) asserts that there are three classes of determiners: demonstratives (*est*-, *es*-, & *aquell*-), articles (*l*- & *un*-) and the indefinite (*algun*-). Rules (12 ii - iv) assign to each of these classes the syntactic features which distinguish them. The demonstrative is assigned the feature of definiteness. The article is assigned either the feature, [+definite] (_l_-), or the feature, [-definite] (_un_-). The indefinites are assigned the feature, [-definite]. The sub-categorization of determiners is motivated by the need to restrict the occurrence of pro-nouns in a noun phrase in terms of the features of these determiners. This sub-categorization is further motivated by the need to describe such phrases as:

(13) un hombre cualquiera 'any man'
(14) *el hombre cualquiera
(15) el hombre ese 'that man'
(16) *un hombre ese

There is an optional transformation which operates upon noun phrases of the form, _cualquier_ _hombre_ 'some man' and _ese_ _hombre_ 'that man'. The effect of the transformation is first to postpose the determiners: _hombre_ _cualquiera_, _hombre_ _ese_; and then to introduce an article preceding the noun. The article must agree with the determiner in definiteness. Noun phrases (13) and (15) are, therefore, acceptable; but (14) and (16) are not.

Having sub-categorized the determiners, the pro-feature may then be introduced into the grammar and added to the complex symbols containing a [+noun] .

(17) [+noun] --> [+/- pro]

This rule requires that each noun in the grammar be specified as to whether or not it is a pro-noun. There are nouns in the lexicon, such as mujer 'woman', auto 'automobile', and hombre 'man', which are marked [-pro] and may replace a C.S. in the pre-terminal string which is so marked. Other nouns, pro-nouns, may replace a [+pro] C.S. in the pre-terminal string of the grammar. These pro-nouns underlie such strings as el bueno 'the good one' and la bella 'the beautiful one'. It will be shown below, however, that these pro-nouns must be selected in terms of specified features of the determiners in the noun phrases in which they occur. This requires a selectional rule in the grammar:

(18) [+noun, +pro] --> C.S. / a______,
where a is the specified features of a determiner.

This rule assigns to a pro-noun all the features of the preceding determiner. The {-animate} pro-noun is restricted by its selectional features to occurrence with [+definite] determiners. Consider:

(19) es- {-animate} --> eso 'that'

(20) l- {-animate} --> ello 'it'

The definite pronouns which have no gender are formed with the {-animate} pro-noun. No such formation is possible with the indefinites, i.e.

(21) a. *algun- {-animate}

b. *un- {-animate}

The underlying noun phrases in (21) are not possible and are ruled out by the selectional restrictions of the pro-noun.

2.3 Lexicon of Pro-Nouns

The base component of the grammar generates sequences of complex symbols. Some of these C.S.'s will contain the features, [+noun, +pro]. By convention, lexical items, themselves expressed as feature complexes, may replace the C.S.'s of the generated string if the two are not distinct. In the strings generated by the grammar there will be [+noun] segments which are marked [+human]; others will be marked [-human]. Nouns in the lexicon are similarly marked. The noun, mujer 'woman', is [+human] and the noun, árbol 'tree', is marked [-human]. The lexical item, árbol, therefore can replace a [-human] segment in the generated string but not a [+human] segment. This requirement is necessary in order to prevent any ungrammatical strings of the type:

(22) *el árbol admira a la mujer
*'the tree admires the woman'

A selectional rule in the base component adds the feature [-human - subject] ([-human] ____) to a [+verb] segment in the pre-terminal string (22). When the verbs are selected from the lexicon some will be able to replace this segment but others (e.g. admirar) will not. The verb, admirar is, by its selectional restrictions, prevented from appearing in a sentence with a [-human] noun as the subject.

2.3.1 In given contexts pro-nouns may show varying degrees of specification with regard to gender, humanness, and animateness. Consider the sentences:

(23) La bella vive aquí.
'The beautiful one (fem.) lives here.'
(24) Ella vive aquí.
'She lives here.'
(25) Alguien vive aquí.
'Someone lives here.'

In (23) the pro-noun which underlies the noun phrase contains only the feature, [2 gender]. In (24) the pro-noun which underlies ella contains the two features: [2 gender, +human]. In (25) the underlying pro-noun contains only the feature, [+human]. Consider also the two sentences:

(26) Veo a la bella.
'I see the beautiful woman.'
(27) Veo la bella.
'I see the beautiful thing.'

The object noun phrases in (26) and (27) are similar to the subject noun phrase of (23) in that they both combine the features [2 gender, 1 number]. But (26) has an additional feature, [+human]; and (27) has an additional feature, [-human].

This variance may be stated systematically by positing a set of rules which apply to pro-nouns in various contexts, adding or subtracting features. Alternatively, a larger number of pro-noun forms may be posited each with a set of selection restrictions in its matrix which allows it to occur only in contexts in which its particular degree of specification is required. It will be shown that the second alternative is preferable.

There is evidence for a minimum of four pro-noun forms in Spanish. There is a {+human} and a {-human} pro-noun.[3] Each of these may occur after the indefinite determiner.

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[3] The following notational convention will be observed: Syntactic features will be enclosed in brackets, e.g. [+human]. Pro-nouns will be designated by their feature specifications enclosed in braces, e.g. {+human}.

(28) algun- {+human} --> alguien 'someone'

(29) algun- {-human} --> algo 'something'

There is a {1 gender} and a {2 gender} pro-noun. Each of these may also occur after the indefinite determiner.

(30) algun- {1 gender} --> alguno 'some one'
or 'something'

(31) algun- {2 gender} --> alguna 'someone'
or 'something'

Now consider the form, *ella*, in *Ella vive aquí*. 'She lives here.' *Ella* combines the specifications [+human] and [2 gender]. In treating pro-noun specification systematically, positing a minimum of forms and filling in the specifications by rules, a form like *ella* forces an arbitrary decision concerning the basic form of the pro-noun. *Ella* may contain a {+human}pro-noun which has undergone a rule forcing a gender distinction; or *ella* may contain the {2 gender} pro-noun which has undergone a rule forcing a specification as to humanness. The choice between these two descriptions is arbitrary and our tendency is to reject a grammar which forces such a choice. The alternative is to posit a larger number of pro-forms and to treat their contextual restriction idiosyncratically.

2.3.2 As was suggested in the discussion of recoverability the feature specifications of pro-nouns in Spanish are very restricted. They are limited to the features [+noun, +pro] , and certain other features of gender, humanness and animation. The occurrence of pro-nouns is also restricted in terms of the determiner stems with which they can occur. Consider the pro-nouns which underlie the forms: algo 'something' and alguien 'someone'. In addition to the features, [+noun] and [+pro] their alternation indicates that the only additional feature permitted in their matrices is one of humanness. Algo contains a [-human] pro-noun and alguien a [+human] one. Features of gender or number cannot be permitted since, for example, *alguien buena with a feminine adjective and *alguien buenos with a plural adjective are not acceptable. The pro-nouns involved are designated {-human} and {+human} indicating that they are distinctively specified only for humanness. As it happens these two pro-nouns occur only with the indefinite determiner, algun- 'some'. No other pro-nouns derived from determiners show a distinctively human / non-human alternation without combining also other features such as gender.[4] The matrices of these two lexical items will therefore contain the selectional rules: + [+indef] ______; - [-indef] ______ . These notations assert that the items occur only with the indefinite determiner.

2.3.3 Consider the subject noun phrases in the sentences:

(32) El pequeño está aquí.
'The small one (masc.) is here.'
(33) La pequeña está aquí.
'The small one (fem.) is here.'

---

[4] The forms, quien / quienes, show a number feature besides the single feature of humanness. But, since these are transformationally introduced pronouns, they do not come under study here.

(34) Uno me interesa más que los otros.

'One (masc.) interests me more than the others.'

(35) Una me interesa más que las otras.

'One (fem.) interests me more than the others.'

The noun phrases in (32) and (34) are masculine and they alternate with their feminine gender counterparts in (33) and (35). Apart from a number feature which is added in the base component of the grammar, the pro-nouns which occur in the underlying subject noun phrases of sentences (32) - (35) are distinctively specified only for gender. The addition of any feature, other than number, to the underlying pro-nouns would result only in an otherwise unmotivated structural ambiguity. These two pro-nouns are: {1 gender} and {2 gender} .

Consider similar noun phrases but now in the object position:

(36) Veo al pequeño.

'I see the small person (masc.).'

(37) Veo el pequeño.

'I see the small one (masc.).'

(38) Veo a la pequeña.

'I see the small person (fem.).'

(39) Veo la pequeña.

'I see the small one (fem.).'

The specification in the underlying pro-noun for humanness which is absent in sentences (32) - (35) is present in (36) - (39). This is necessary simply because there is a very general transformation in Spanish which inserts a personal 'a' initially in each object noun phrase if that noun phrase contains a human noun. Any noun, pro-noun or otherwise, in the object noun phrase must be specified [+/- human]. In order to insure this specification, the {1 gender} and {2 gender} pro-nouns, which are not so specified, must be restricted to the subject noun phrases: - Vb________. The strict sub-categorization rule states that these two pro-nouns may not occur in object noun phrases.

2.3.4 Sentences (36) - (39) suggest the existence of a set of pro-nouns which are specified for both gender and humanness as well as for [+noun, +pro] and some feature of number:

$$\begin{Bmatrix}+\text{human}\\ 1\text{ gender}\end{Bmatrix} \quad \begin{Bmatrix}+\text{human}\\ 2\text{ gender}\end{Bmatrix} \quad \begin{Bmatrix}-\text{human}\\ 1\text{ gender}\end{Bmatrix} \quad \begin{Bmatrix}-\text{human}\\ 2\text{ gender}\end{Bmatrix}$$

This set, however, must be revised. Consider the object noun phrases in the sentences:

(40) Veo al pequeño.
'I see the small person.'
(41) Lo veo a él.
'I see him.'
(42) Veo a la pequeña.
'I see the small person.'
(43) La veo a ella.
'I see her.'

The pro-nouns in (40) and (41) share the features, [1 gender, +human] , and those in (42) and (43) share the features, [2 gender, +human] . The pro-nouns in (40) and (42) are not identical with those in (41) and (43) respectively. Consider the fact that the noun phrases of (40) and (42) contain restrictive modifiers derived from included sentences while the noun phrases in (41) and (43) may not accept such modification. The sentences,

(44) *lo veo a él pequeño
(45) *la veo a ella pequeña

are not acceptable. In order to explain the restrictions upon the occurrence of restrictive modifiers.

with certain pro-nouns it is necessary to assume that these forms are specified with respect to a proper / common distinction. The pro-nouns underlying (41) and (43) are proper nouns while those underlying (40) and (42) are common nouns. The {1 gender} and {2 gender} pro-nouns, which occur with restrictive modifiers, are also common nouns.

The proper / common noun distinction has usually been based upon whether or not the noun in question occurs with a determiner (Stevens 1966: 48). There are, however, certain counter-examples to this claim.

Postal's article on the pronouns of English (1966) argues in favor of supposing that proper nouns contain features which are analogous to those of the determiners. Specifically he suggests that proper nouns are marked [+definite]. One might argue, from this, that noun phrases containing proper nouns contain also underlying definite determiners. Consider the sentences:

(46)

Aunque la mujer era muy fuerte, ella no podía llevarlo.
'Although the woman was very strong, she could not carry it.'

(47)

Aunque ese hombre era muy fuerte, él no podía llevarlo.

'Although that man was very strong, he could not carry it.'

(48)

Aunque Jorge era muy fuerte, él no podía llevarlo.

'Although George was very strong, he couldn't carry it.'

(49)

*Aunque una mujer era muy fuerte, ella no podía llevarlo.

*'Although a woman was very strong, she couldn't carry it.'

(50)

*Aunque algún hombre era muy fuerte, él no podía llevarlo.

*'Although some man was very strong, he could not carry it.'

Noun phrases containing definite determiners, e.g. (46) and (47), and proper nouns, e.g. (48), all may be referred to with a pronoun derived from a definite article, (_él_ or _ella_). The definite pronouns may not refer to noun phrases containing indefinite determiners as in (49) and (50).

Now consider environments in which only indefinites may occur. Definite noun phrases are not permitted in a construction with hay 'there is' or 'there are'. E.g.

(51) Hay un libro sobre la mesa.
'There is a book on the table.'
(52) Hay algún libro sobre la mesa.
'There is some book on the table.'
(53) Hay algo sobre la mesa.
'There is something on the table.'
(54) Hay uno sobre la mesa.
'There is one on the table.'
(55) *Hay el libro sobre la mesa.
*'There is the book on the table.'
(56) *Hay este libro sobre la mesa.
*'There is this book on the table.'
(57) *Hay Juan sobre la mesa.
*'There is John on the table.'

Sentences (55) - (56) show that noun phrases with definite determiners and also proper nouns are not permitted in a construction with hay. Indefinite nouns and nouns with indefinite determiners are permitted as in sentences (51) - (54).

The evidence seems to suggest that, at least in their underlying strings, noun phrases which have proper nouns also have definite determiners of some sort. If the pro-nouns which occur with el and la and for él and ella are proper nouns then these cases provide further evidence for abandoning the criterion of occurrence with a determiner as the basis for distinguishing the proper noun.

What actually appears to distinguish proper and common nouns is whether they permit restrictive relative clauses or not. Noun phrases which contain common nouns or a definite determiner may take both restrictive and non-restrictive clauses. Consider:

(58) la señora que acaba de salir
'the woman that just left'

(59) la señora, quien acaba de salir
'the woman, who just left'

The non-restrictive relative in Spanish is characterized by the possible occurrence of the pronoun, quien 'who', refering to a [+human] noun (Ramsey, 1956: 194). Elsewhere, the relative pronoun, que 'that', is required. Proper nouns permit only non-restrictive clauses:

(60) Juan, quien era interesante
'John, who was interesting'

(61) Juan, quien acaba de salir
'John, who just left'

(62) *Juan que era interesante
*'John who was interesting'

(63) *Juan que acaba de salir
*'John that just left'

Phrases (62) and (63) when taken as restrictive clauses are not possible. The [+/-common]distinction in Spanish is required in order to determine whether the noun may take a restrictive relative - not whether it may have a determiner in the underlying string. This same distinction may profitably be applied to the pronouns of the language.

Under this interpretation, sentences (36) - (39) exemplify a set of common pro-nouns:

$$\left\{\begin{array}{l}+\text{human}\\ 1\ \text{gender}\\ +\text{common}\end{array}\right\} \quad \left\{\begin{array}{l}+\text{human}\\ 2\ \text{gender}\\ +\text{common}\end{array}\right\} \quad \left\{\begin{array}{l}-\text{human}\\ 1\ \text{gender}\\ +\text{common}\end{array}\right\} \quad \left\{\begin{array}{l}-\text{human}\\ 2\ \text{gender}\\ +\text{common}\end{array}\right\}$$

They are specified +common since in (36) - (39) they occur with restrictive modifiers. They occur only in the object noun phrases of the language since in the subject noun phrases they would cause structural ambiguity with regard to humanness. A sentence like:

(64) La pequeña vive aquí.

'The small one lives here.'

might be equally well derived from a [+human] or a [-human] pro-noun. The matrices of these pro-nouns, therefore, contain the restriction: -_______VP, which asserts that they may not occur preceding a verb phrase.

2.3.5 Now consider the sentences:

(65) El está cubierto de polvo.

'He is covered with dust.'

(66) Ella está cubierta de polvo.

'She is covered with dust.'

(67) Está cubierto de polvo.

'It (masc.) is covered with dust.'

(68) Está cubierta de polvo.

'It (fem.) is covered with dust.'

Sentence (65) contains in its subject noun phrase the pro-noun:

$$\left\{\begin{matrix}+\text{human}\\ 1\ \text{gender}\\ -\text{common}\end{matrix}\right\}$$

a human, masculine, proper noun. Combined with the definite article it forms the third person singular pronoun, él. In (66) the pro-noun which underlies ella 'she' is human, feminine, and proper:

$$\left\{\begin{matrix} \text{+human} \\ \text{2 gender} \\ \text{-common} \end{matrix}\right\}$$

By a rule which will be discussed in detail (§3.6.2) [-human] pro-nouns which are combined with definite articles are obligatorily deleted in the terminal string. Sentences (67) and (68) are cases of this deletion. In (67) the pro-noun is:

$$\left\{\begin{matrix} \text{-human} \\ \text{1 gender} \\ \text{-common} \end{matrix}\right\}$$

In sentence (68) the underlying pro-noun is:

$$\left\{\begin{matrix} \text{-human} \\ \text{2 gender} \\ \text{-common} \end{matrix}\right\}$$

The gender and number features of these pro-nouns are reflected in the predicate adjectives: cubierto and cubierta 'covered'. This set of four proper pro-nouns is restricted in its occurrence to the definite article. Elsewhere, [-common] nouns of this sort are not found. In the sentence,

(69) Busco a ése.
'I'm looking for that person.'

the pro-noun underlying ése 'that person' has features of number and gender but it is a common noun since it permits a restrictive modifier, e.g.

(70) Busco a ése inteligente.
'I'm looking for that intelligent person.'

A general rule requires that proper nouns not occur with restrictive modifiers. Thus, the matrices of these pro-nouns contain the features: - [-def,-art]____, indicating that they may not occur after any form which is not definite and not an article; and [-restrictive] , indicating that the relative transformation may not apply.[5]

2.3.6 Consider the noun phrases:

(71) el bueno 'the good one (masc.)'
(72) la buena 'the good one (fem.)'

where the strings contain underlying pro-nouns with gender features and,

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[5] For a discussion of the type of transformation which may apply to sentences included in a noun phrase containing a proper noun see Smith (1964).

(73) lo bueno 'goodness'

where the string contains no gender feature. Similarly compare sentences in which the pro-nouns underlying the object noun phrases are specified for humanness:

(74) Admiro al bueno.
'I admire the good man.'

(75) Admiro el bueno.
'I admire the good thing.'

with a sentence containing a similar noun phrase in which no such specification is discernible:

(76) Admiro lo bueno.
'I admire goodness.'

A [-animate] pro-noun is assumed in these and similar strings which show neither gender nor humanness features while at the same time alternating with forms which do show these features. This particular pro-noun is distinctively specified [-animate] and contains no feature of number or gender.

Consider also the sentences:

(77) Pienso en ello.
'I'm thinking about it.'

γ

(78) Me dijo eso.

'He told me that.'

The forms, *ello* (*lo*) 'it' and *eso* 'that' are also terminal representation of the underlying {-animate} pro-noun. It may occur with any determiner which is marked [+definite], i.e. the definite article and the demonstratives: + [+def] ______. It is not a proper noun since constructions with restrictive modifiers,

(79) lo que te dije 'what I told you'

(80) eso que te dije 'that which I told you'

are acceptable. But the {-animate} pro-noun is not specified [+/-common] for reason discussed in § 4.1.

2.3.7 SUMMARY LIST OF SPANISH PRO-NOUNS

I Common pro-nouns which are distinctively specified for gender and humanness:

$$\begin{Bmatrix}\text{+human}\\ \text{1 gender}\\ \text{+common}\end{Bmatrix} \begin{Bmatrix}\text{+human}\\ \text{2 gender}\\ \text{+common}\end{Bmatrix} \quad \begin{Bmatrix}\text{+human}\\ \text{1 gender}\\ \text{+common}\end{Bmatrix} \begin{Bmatrix}\text{-human}\\ \text{1 gender}\\ \text{+common}\end{Bmatrix}$$

These pro-nouns may not occur in the subject noun phrase: -______VP

II Proper pro-nouns which are distinctively specified for gender and humanness:

$$\left\{\begin{array}{l}\text{+human}\\ \text{1 gender}\\ \text{-common}\end{array}\right\} \quad \left\{\begin{array}{l}\text{+human}\\ \text{2 gender}\\ \text{-common}\end{array}\right\} \quad \left\{\begin{array}{l}\text{-human}\\ \text{1 gender}\\ \text{-common}\end{array}\right\} \left\{\begin{array}{l}\text{-human}\\ \text{2 gender}\\ \text{-common}\end{array}\right\}$$

These pro-nouns occur only with the definite article: - [-def, -art] ______; and they may not take restrictive modifiers: [-restrictive] .

III The distinctively inanimate pro-noun: {-animate}
This pro-noun occurs only with definite determiners: + [+def] ________ .

IV The pro-nouns which are specified distinctively only for gender:

{1 gender} {2 gender}

These pro-nouns are both [+common] ; and they may not occur in an object noun phrase: -Vb_____.

V Pro-nouns which are distinctively specified only for humanness:

{+human} {-human}

They may occur only with the indefinite determiner: + [+indef] ________; - [-indef] _ _________ .

3. THE DERIVATION OF THE PRO-NOUNS

Having discussed the pro-nouns of Spanish in terms of their feature composition and how they are defined and introduced into the generative grammar, they may now be studied in terms of the terminal forms which they produce. In some cases the pro-nouns will be deleted from their strings but in other cases they will remain and be fused morphophonemically with the determiners. Both of these processes will be considered instances of pronominalization in Spanish. The comprehensive examination of pro-noun derivations will provide occasions for bringing out some notions about the structure of the Spanish noun phrase.

3.1 The Common Pro-Nouns

3.1.1 The phrase structure rules of Spanish produce noun phrases which consist of a single noun preceded by a determiner and followed optionally by an included sentence. The determiners which may occur in the noun phrase include the demonstratives, the indefinite determiner, the indefinite article and the definite article. Consider the following noun phrases, each with a common noun but without an included sentence.

(1) With a demonstrative determiner:

esta ciudad	'this city'
esa ciudad	'that city'
aquella ciudad	'that city yonder'

este traje	'this suit'
ese traje	'that suit'
aquel traje	'that suit yonder'

(2) With an indefinite determiner:

alguna ciudad	'some city'
algun traje	'some suit'

(3) With an indefinite article:

una ciudad	'a city'
un traje	'a suit'

(4) With a definite article:

la ciudad	'the city'
el traje	'the suit'

The underlying forms of these noun phrases are the pre-terminal strings generated by the base component.

In the terminal strings cited the determiners are inflected for number and gender so that they agree with the noun they precede. Each noun selected from the lexicon contains an inherent specification for either masculine gender as *traje* 'suit' or feminine gender as *ciudad* 'city'. The base component of the grammar adds to this inherent specification a further specification for number: singular ([1 number]) or plural ([2 number]). All of the noun phrases in (1) - (4) contain nouns which are specified [1 number] (singular). The underlying strings contain only the stems of the determiners and transformational rules add to these stems the features for number and gender which are contained in the nouns. In the underlying strings these stems may be represented by the formatives:

(5) est- 'the proximal demonstrative'
es- 'the medial demonstrative'
aquell- 'the distal demonstrative'
algun- 'the indefinite determiner'
un- 'the indefinite article'
l- 'the definite article'

The terminal forms of these determiners may be derived by rewriting them according to the feature contexts which they acquire. Thus, est- is rewritten as este in the context [lgender, 1 number] ; but it is rewritten as esta in the context [2 gender, 1 number] .

The pro-nouns developed in Chapter 2 which are marked [+common] are derived in much the same way as the [+common] non-pro-nouns, ciudad and traje . A [+common] pro-noun is selected from the lexicon and placed in the pre-terminal string if the segment which it replaces contains the features [+noun] and [+pro] . The segment will also contain a number feature which is carried over to the selected lexical item from the complex symbol generated by the base component rules. The pro-noun will contain as an inherent feature some specification as to gender. If the noun phrase into which the pro-noun is placed is a subject noun phrase, i.e. if it precedes the verb phrase, then the [+common] pro-noun will be either the {1 gender} or the {2 gender} form. Consider a series of underlying strings each with a different determiner but all with a {1 gender} pro-noun.

(6)

$$\begin{array}{l} \text{est-} \\ \text{es-} \\ \text{aquell-} \\ \text{algun-} \\ \text{un-} \end{array} \quad \begin{bmatrix} \text{+noun} \\ \text{+pro} \\ \text{+common} \\ \text{1 gender} \\ \text{1 number} \end{bmatrix} \quad \text{VP}$$

The determiner agreement rule assigns to each of the determiners the gender and number features of the pro-noun. The string can then be represented:

(7)

$$\begin{array}{l} \text{este} \\ \text{ese} \\ \text{aquel} \\ \text{alguno} \\ \text{uno} \end{array} \quad \begin{bmatrix} \text{+noun} \\ \text{+pro} \\ \text{+common} \\ \text{1 gender} \\ \text{1 number} \end{bmatrix} \quad \text{VP}$$

After the agreement rule has applied to the determiners the pro-noun may be deleted. The determiners are in the form in which they appear in the language. They are simply determiners and the sole constituents of the noun phrase. The pro-noun deleted, they appear in the complete sentences:

(8) Este está en la casa.
'This is in the house.'
Ese está en la casa.
'That is in the house.'

Aquél está en la casa.
'That is in the house.'
Alguno está en la casa.
'Some one (thing) is in the house.'
Uno está en la casa.
'One is in the house.'

Notice that the reference of the determiners includes both human and non-human. This is explained in the grammar by not including features of humanness in the matrices of the [+common] pro-nouns which occur in the subject noun phrases.

3.1.2 To illustrate the inflection of the determiners according to the gender and number of the noun which they accompany, consider these subject noun phrases containing pro-nouns with various specifications:

(9) a.

$$\begin{array}{l} \text{est-} \\ \text{es-} \\ \text{aquell-} \\ \text{algun-} \\ \text{un-} \end{array} \quad \begin{bmatrix} +\text{noun} \\ +\text{pro} \\ +\text{common} \\ 2\ \text{gender} \\ 1\ \text{number} \end{bmatrix} \quad \text{VP}$$

b.
$$\begin{array}{l} \text{est-} \\ \text{es-} \\ \text{aquell-} \\ \text{algun-} \\ \text{un-} \end{array} \begin{bmatrix} +\text{noun} \\ +\text{pro} \\ +\text{common} \\ 1\ \text{gender} \\ 2\ \text{number} \end{bmatrix} \quad \text{VP}$$

c.
$$\begin{array}{l} \text{est-} \\ \text{es-} \\ \text{aquell-} \\ \text{algun-} \\ \text{un-} \end{array} \begin{bmatrix} +\text{noun} \\ +\text{pro} \\ +\text{common} \\ 2\ \text{gender} \\ 2\ \text{number} \end{bmatrix} \quad \text{VP}$$

The determiners each acquire the number and gender characteristics of the noun which follows. The pro-noun, unlike the non-pro-noun, is deleted and the determiners in their inflected forms appear alone in the subject noun phrases of complete sentences:

(10) a. Esta me conoció. 'This one met me.'
Esa me conoció. 'That one met me.'
Aquella me conoció. 'That one met me.'
Alguna me conoció. 'Some one met me.'
Una me conoció. 'One met me.'

b. Estos me conocieron. 'These met me.'
Esos me conocieron. 'Those met me.'
Aquellos me conocieron. 'Those met me.'

Algunos me conocieron. 'Some met me.'

Unos me conocieron. 'Some met me.'

c. Estas me conocieron. 'These met me.'

Esas me conocieron. 'Those met me.'

Aquellas me conocieron. 'Those met me.'

Algunas me conocieron. 'Some met me.'

Unas me conocieron. 'Some met me.'

The determiners in (a) all have the features [2 gender, 1 number] ; those in (b) all have [1 gender, 2 number] ; and those in (c) have [2 gender, 2 number] . These features correspond to the features of the pro-nouns in their respective underlying strings in (9).

3.2 The Semantic Interpretation of Pro-forms

In the sentences of (10) it is evident that the determiners in the noun phrases all refer to a human subject. Contrast this with the sentences in (8) concerning which it was remarked that the determiners were not differentiated as to human or non-human reference. Although none of the pro-nouns involved in either (8) or (10) are specified for humanness their reference varies in different contexts. In one case the reference is neither human nor non-human:

(11) Este está en la casa.
'This is in the house.'

In another case the reference is decidedly human:

(12) Este me conoció. (masc.)
'This person met me.'

In a third case the reference is clearly non-human:

(13) Este es su libro.
'This is his book.'

Katz and Postal (1964: 82 - 84) point out that the semantic features of pro-forms are largely derived from two sources. One source will be their syntactic features. If a pro-noun has the feature [+human] it follows that the semantic matrix of that pro-noun will specify human reference. Another source will be the sentential context. This is what gives the sentences in (11), (12) and (13) alternatively human, non-human and unspecified reference. In sentence (11) the verb phrase does not require that the subject of the sentence be either human or non-human and so the reference of the subject pro-noun is left open. In sentence (12) the verb has, as a part of its syntactic matrix, a feature which restricts it to occurrence with human subjects. The syntactic matrix of the pro-noun, being unspecified for this feature, does not contrast with this specification and so the grammar permits the pro-noun and the verb to co-occur. The reference of the pro-noun, however, takes on the reference (human subject) which is implied by the verb. In sentence (13) the verb phrase implies a non-human subject and so the pro-noun and the subject noun phrase acquire this reference from the context.

3.3 The Definite Article with Common Pro-Nouns

Examples involving the definite article as the determiner in a noun phrase with a common pro-noun require some additional explanation. Consider these underlying strings of noun phrases:

(14) a.

$$1\text{-}\quad\begin{bmatrix}\text{+noun}\\\text{+pro}\\\text{+common}\\\text{1 gender}\\\text{1 number}\end{bmatrix}\quad VP$$

b.

$$1\text{-}\quad\begin{bmatrix}\text{+noun}\\\text{+pro}\\\text{+common}\\\text{2 gender}\\\text{1 number}\end{bmatrix}\quad VP$$

c.

$$1\text{-}\quad\begin{bmatrix}\text{+noun}\\\text{+pro}\\\text{+common}\\\text{1 gender}\\\text{2 number}\end{bmatrix}\quad VP$$

d.

$$1\text{-}\quad\begin{bmatrix}\text{+noun}\\\text{+pro}\\\text{+common}\\\text{2 gender}\\\text{2 number}\end{bmatrix}\quad VP$$

These strings fall under the domain of the same rules which govern the derivation of the examples with other determiners. The definite article acquires the number and gender features of the pro-noun and then the pro-noun is deleted. The output of these rules would be the strings:

(15) a. el canta

b. la canta

c. los cantan

d. las cantan

These, however, are not terminal strings in Spanish. The definite article cannot stand alone as the single constituent of a noun phrase. In order to account for this there must be a rule which applies to strings like those in (15) deleting the definite article if it is the sole constituent of the noun phrase. The strings then become:

(16) Canta. 'He sings.'

Canta. 'She sings.'

Cantan. 'They sing.'

Cantan 'They sing.'

This rule attributes an ambiguity to the strings with regard to gender and definiteness. The verb reflects the number feature of the pro-noun but the derived sentences reflect neither the gender feature of the pro-noun nor the definite feature of the article. The rule is, nevertheless, descriptively adequate since there are contexts in which this ambiguity is resolved.

Consider the sentences:

(17) a. Está cubierto. 'It is covered.' (masc.)
b. Está cubierta. 'It is covered.' (fem.)
c. Están cubiertos. 'They are covered.' (masc.)
d. Están cubiertas. 'They are covered.' (fem.)

In sentences which contain adjectives or past participles in the verb phrase the gender ambiguity which is ascribed to the sentences of (16) is uncovered. Sentences (17 a & c) reflect the {1 gender} pro-noun which has been deleted. Sentences (17 b & d) reflect a {2 gender} pro-noun.

The sentences of (17), however, are ambiguous with respect to the underlying determiner. This ambiguity is resolved in the application of an interrogative transformation. Katz and Postal (1964: 80 ff.) establish in the underlying strings of interrogative sentences in English the presence of a 'question morpheme', Q . A similar question morpheme may also be assumed for Spanish. One feature of Q is that it may be attached to some noun phrase containing a pro-noun and form an interrogative upon that noun phrase. Consider the sentences with interrogative pro-nouns:

(18) a. ¿Qué está cubierto?
'What is covered?'

b. ¿Qué libro está cubierto?
'What book is covered?'

c. ¿Cuál está cubierto?
'Which is covered?'

d. ¿Cuál libro está cubierto?
'Which book is covered?'

Notice that the distinction between the interrogative pronouns, qué and cuál, is [-definite] and [+definite] respectively. Noun phrases containing definite determiners may not occur with the indefinite predicate, hay 'there is':

(19) Hay un libro en la mesa.
'There is a book on the table.'

(20) *Hay el libro en la mesa.
*'There is the book on the table.'

Similarly, the [+definite] interrogative pronoun may not form an interrogative on a noun phrase in this construction:

(21) ¿Qué hay en la mesa?
'What is there on the table?'

(22) *¿Cuál hay en la mesa?
*'Which is there on the table?'

The interrogative pronouns, _qué_ and _cuál_, are, furthermore, not nominals. In sentences (18 b & d) they may occur preceding a noun. Contrast this with an interrogative pronoun which is a nominal. The form _quién_ 'who' may not precede a noun:

(23) *¿Quién hombre está aquí?
*'Who man is here?'

Since _qué_ and _cuál_ are not nominals and since they may occur preceding a noun or as the sole constituents of a noun phrase, as in (18 a & c), it must be that they are determiners of some sort.

In order to explain this the question morpheme is attached to a noun phrase containing a pro-noun. The sentences in (18) have the following underlying forms in their noun phrases:

(24) a.
$$\text{Q} \quad + \text{ un-} \quad \begin{bmatrix} \text{+noun} \\ \text{+pro} \\ \text{+common} \\ \text{1 gender} \\ \text{1 number} \end{bmatrix} \quad \text{VP}$$

b. Q + un- libro VP

c.
$$\text{Q} \quad + \text{ l-} \quad \begin{bmatrix} \text{+noun} \\ \text{+pro} \\ \text{+common} \\ \text{1 gender} \\ \text{1 number} \end{bmatrix} \quad \text{VP}$$

d. Q + l- libro VP

The question morpheme and the determiner combine to form a single segment containing the features of Q (+pro, +interrogative) and the features of the determiner (+article, +/- definite). The pro-nouns are then deleted giving the terminal strings of (18). The ambiguity which is introduced by the deletion of the definite article when it is the sole constituent of a noun phrase can be justified since adjectives in the verb phrase reflect the features of number and gender and the interrogative transformations reflect the definite character of the article.

3.4 Included Sentences in the Noun Phrase

The [+common] pro-nouns may occur in a noun phrase with an included sentence. It is from this included sentence that by relative and noun modification transformations the relative clauses and adjectives are derived. As a demonstration of these processes consider the noun phrases with included sentences marked off by #...#,

(25)

a.	el		el	
	ese	traje #	ese	traje es blanco #
	algún		algún	
	un		un	
b.	la		la	
	esa	casa #	esa	casa es blanca #
	alguna		alguna	
	una		una	

The relativization rule in Spanish selects a noun phrase which contains an included sentence. Under the condition that the noun of the included sentence is the same as the noun of the phrase in which it occurs, the noun and the determiner in the included sentence are replaced by the relative pronoun, que 'that'. Applying this rule to (25 a & b) the output is:

(26) a. el
ese
traje que es blanco
algún
un

b. la
esa
casa que es blanca
alguna
una

The noun phrases of (26) are acceptable terminal strings in Spanish, which may undergo the noun modification transformation. The effect of this rule is to delete the relative pronoun and the copula (*ser*) from the relative clause. Applying this rule to (26) gives:

(27) a. el traje blanco 'the white suit'
ese traje blanco 'that white suit'
algún traje blanco 'some white suit'
un traje blanco 'a white suit'

b. la casa blanca 'the white house'
esa casa blanca 'that white house'
alguna casa blanca 'some white house'
una casa blanca 'a white house'

Exactly the same rules apply when the noun phrase includes, besides an included sentence, a [+common] pro-noun. Consider underlying strings which are noun phrases and which contain pro-nouns:

(28)

a. $$\begin{array}{l} \text{el} \\ \text{ese} \\ \text{alguno} \\ \text{uno} \end{array} \begin{bmatrix} +\text{noun} \\ +\text{pro} \\ +\text{common} \\ 1 \text{ gender} \\ 1 \text{ number} \end{bmatrix} \# \qquad \begin{array}{l} \text{el} \\ \text{ese} \\ \text{alguno} \\ \text{uno} \end{array} \begin{bmatrix} +\text{noun} \\ +\text{pro} \\ +\text{common} \\ 1 \text{ gender} \\ 1 \text{ number} \end{bmatrix} \text{ es blanco } \#$$

b. $$\begin{array}{l} \text{la} \\ \text{esa} \\ \text{alguna} \\ \text{una} \end{array} \begin{bmatrix} +\text{noun} \\ +\text{pro} \\ +\text{common} \\ 2 \text{ gender} \\ 1 \text{ number} \end{bmatrix} \# \qquad \begin{array}{l} \text{la} \\ \text{esa} \\ \text{alguna} \\ \text{una} \end{array} \begin{bmatrix} +\text{noun} \\ +\text{pro} \\ +\text{common} \\ 2 \text{ gender} \\ 1 \text{ number} \end{bmatrix} \text{ es blanca } \#$$

To these strings the relativization rule applies giving the noun phrases in (29) after the pro-noun is deleted.

(29) a. el que es blanco
'the (one) that is white'

ese que es blanco
'that (one) that is white'
alguno que es blanco
'some (one) that is white'
uno que es blanco
'one that is white'

b. la que es blanca
'the (one) that is white'
esa que es blanca
'that (one) that is white'
alguna que es blanca
'some (one) that is white'
una que es blanca
'one that is white'

The noun modification rule may then apply deleting the relative pronoun and copula giving the noun phrases of (30) with the pro-nouns deleted.

(30) a. el blanco 'the white (one)'
ese blanco 'that white (one)'
alguno blanco 'some white (one)'
uno blanco 'a white (one)'

b. la blanca 'the white (one)'
esa blanca 'that white (one)'
alguna blanca 'some white (one)'
una blanca 'a white (one)'

3.5 Common Pro-Nouns in the Object Noun Phrase

3.5.1 When the [+common] pro-nouns occur in the object noun phrases of Spanish they must be specified for humanness. (See § 2.3.3) Consider the following object noun phrases with pro-nouns:

(31) a.

$$\begin{array}{l}\text{esa}\\ \text{alguna}\\ \text{una}\end{array}\quad\begin{bmatrix}+\text{noun}\\ +\text{pro}\\ +\text{common}\\ 2\ \text{gender}\\ 1\ \text{number}\\ +\text{human}\end{bmatrix}$$

b.

$$\begin{array}{l}\text{la}\\ \text{esa}\\ \text{alguna}\\ \text{una}\end{array}\quad\begin{bmatrix}+\text{noun}\\ +\text{pro}\\ +\text{common}\\ 2\ \text{gender}\\ 1\ \text{number}\\ +\text{human}\end{bmatrix}\quad\text{que es alta}$$

c.

$$\begin{array}{l}\text{esa}\\ \text{alguna}\\ \text{una}\end{array}\quad\begin{bmatrix}+\text{noun}\\ +\text{pro}\\ +\text{common}\\ 2\ \text{gender}\\ 1\ \text{number}\\ -\text{human}\end{bmatrix}$$

d.

$$\begin{array}{l}\text{la}\\ \text{esa}\\ \text{alguna}\\ \text{una}\end{array}\quad\begin{bmatrix}+\text{noun}\\ +\text{pro}\\ +\text{common}\\ 2\ \text{gender}\\ 1\ \text{number}\\ -\text{human}\end{bmatrix}\quad\text{que es alta}$$

Before the pro-nouns are deleted the personal 'a' rule applies introducing the a initially in the noun phrases with [+human] pro-nouns. Then the pro-nouns are deleted and the strings may be placed into a sentence.

(32) a. Veo a ésa. 'I see that (one).'
Veo a alguna. 'I see some (one).'
Veo a una. 'I see one. '
b. Veo a la que es alta. 'I see the (one) that is tall.'
Veo a ésa que es alta. 'I see that (one) that is tall.'
Veo a alguna que es alta. 'I see some (one) that is tall.'
Veo a una que es alta. 'I see one that is tall.'
c. Veo ésa. 'I see that (one).'
Veo alguna. 'I see some (one).'
Veo una. 'I see one.'
d. Veo la que es alta. 'I see the (one) that is tall.'
Veo ésa que es alta. 'I see that (one) that is tall.'
Veo alguna que es alta. 'I see some (one) that is tall.'

Veo una que es alta. 'I see one that is
tall.'

Because some transitive verbs (e.g. tener 'to have') do not permit the operation of the personal 'a' transformation, the rule operates only if the verb has the feature, [+ 'a'] .

3.5.2 If the noun phrase is in the object position and the article is definite the derivation is somewhat more complex. Some verbs in Spanish permit the deletion of their direct objects (e.g. cantar 'to sing') while others do not (e.g. admirar 'to admire). Furthermore, it is not strictly speaking the noun or pro-noun which may or may not be deleted. A non-pro-noun, in the interest of recoverability, may never be deleted. A [+common] pro-noun is always deleted (§ 4.1). What may or may not be deleted in these cases is the remaining determiner or a reflection of it. Consider the strings of the form:

(33) a. Juan canta la [+noun, +pro]
b. Juan admira la [+noun, +pro]

A proclitic pronoun, L, is introduced into a verb phrase if the verb phrase contains a noun phrase which consists of a definite article followed by a pro-noun but no included sentence. The proclitic pronoun is introduced before the verb. The rule obligatorily applies to strings in (33) giving:

(34) a. Juan L canta la [+noun, +pro]
b. Juan L admira la [+noun, +pro]

The proclitic pronoun then acquires the number and gender features of the pro-noun in the object giving:

(35) a. Juan la canta la [+noun, +pro]
b. Juan la admira la [+noun, +pro]

The pro-nouns are then deleted:

(36) a. Juan la canta la
b. Juan la admira la

A definite article occurring alone in a noun phrase is deleted:

(37) a. Juan la canta. 'John sings it.'
b. Juan la admira. 'John admires it.'

The verb, cantar, allows the deletion of its object noun phrase, or more accurately of the proclitic pronoun. An alternative form of (37 a), derived by an optional deletion rule, is:

(38) Juan canta. 'John sings.'

3.6 The Proper Pro-Nouns

The pro-nouns which are distinctively specified [-common] are also specified for gender and humanness. They may occur only with the definite article and never before a restrictive relative or adjective. Consider these pro-nouns as they occur in the subject noun phrase of a sentence. For the set of [+human] pro-nouns the underlying strings might be:

(39) a.

$$1\text{-}\quad\begin{bmatrix}+\text{noun}\\ +\text{pro}\\ -\text{common}\\ 1\ \text{gender}\\ 1\ \text{number}\\ +\text{human}\end{bmatrix}\quad \text{VP}$$

b.

$$1\text{-}\quad\begin{bmatrix}+\text{noun}\\ +\text{pro}\\ -\text{common}\\ 2\ \text{gender}\\ 1\ \text{number}\\ +\text{human}\end{bmatrix}\quad \text{VP}$$

c.

$$1\text{-}\quad\begin{bmatrix}+\text{noun}\\ +\text{pro}\\ -\text{common}\\ 1\ \text{gender}\\ 2\ \text{number}\\ +\text{human}\end{bmatrix}\quad \text{VP}$$

d.

$$1\text{-}\quad\begin{bmatrix}+\text{noun}\\ +\text{pro}\\ -\text{common}\\ 2\ \text{gender}\\ 2\ \text{number}\\ +\text{human}\end{bmatrix}\quad \text{VP}$$

Proper pro-nouns are obligatorily fused with their preceding determiners. (See § 4.1) This process involves the combination of the lexical matrices of both the determiner and the pro-noun so that one complex symbol is formed which is both a determiner and a pro-noun. These complex symbols are then provided their phonological form by morphophonemic rules in the grammar. The underlying strings of (39), when completely derived and provided with a verb phrase, appear as the third person personal pronouns in (40).

(40) a. *El* es viejo. 'He is old.'

b. *Ella* es vieja. 'She is old.'

c. *Ellos* son viejos. 'They (masc.) are old.'

d. *Ellas* son viejas. 'They (fem.) are old.'

There is a set of [-human] pro-nouns which corresponds to the [+human] forms of (39). Consider these underlying noun phrases:

(41) a.

$$\text{l-} \quad \begin{bmatrix} \text{+noun} \\ \text{+pro} \\ \text{-common} \\ \text{1 gender} \\ \text{1 number} \\ \text{-human} \end{bmatrix} \quad \text{VP}$$

b.

$$\text{l-} \quad \begin{bmatrix} \text{+noun} \\ \text{+pro} \\ \text{-common} \\ \text{2 gender} \\ \text{1 number} \\ \text{-human} \end{bmatrix} \quad \text{VP}$$

c.

$$\text{l-} \quad \begin{bmatrix} \text{+noun} \\ \text{+pro} \\ \text{-common} \\ \text{1 gender} \\ \text{2 number} \\ \text{-human} \end{bmatrix} \quad \text{VP}$$

d.

$$\text{l-} \quad \begin{bmatrix} \text{+noun} \\ \text{+pro} \\ \text{-common} \\ \text{2 gender} \\ \text{2 number} \\ \text{-human} \end{bmatrix} \quad \text{VP}$$

The general rule of pro-noun and determiner fusion applies here as in the case of the [+human] pro-nouns; but there is no terminal representation for the [-human] forms. The morphophonemic rules fail to give the sequences any phonological form and they are deleted. (See § 4.2 Rule 13) The terminal strings of (41) are:

(42) a. Es viejo. 'It is old.' (masc.)

b. Es vieja. 'It is old.' (fem.)

c. Son viejos. 'They are old.' (masc.)

d. Son viejas. 'They are old.' (fem.)

3.6.2 Consider the [-common] pro-nouns where they occur in the object noun phrase in Spanish:

(43) a. Juan admira el $\begin{bmatrix}-\text{common}\\+\text{human}\end{bmatrix}$

b. Juan admira la $\begin{bmatrix}-\text{common}\\+\text{human}\end{bmatrix}$

c. Juan admira el $\begin{bmatrix}-\text{common}\\-\text{human}\end{bmatrix}$

d. Juan admira la $\begin{bmatrix}-\text{common}\\-\text{human}\end{bmatrix}$

The rule governing the introduction of the proclitic object pronoun applies to these strings. (Cf. § 3.5.2 & 4.2 Rule 8) The pronoun is placed before the verb and is assigned the number and gender features of the object pro-noun. The sentences then become:

(44) a. Juan lo admira el $\begin{bmatrix}-\text{common}\\+\text{human}\end{bmatrix}$

b. Juan la admira la $\begin{bmatrix}-\text{common}\\+\text{human}\end{bmatrix}$

c. Juan lo admira el $\begin{bmatrix}-\text{common}\\-\text{human}\end{bmatrix}$

d. Juan la admira la $\begin{bmatrix}-\text{common}\\-\text{human}\end{bmatrix}$

The definite articles and the [-common] pro-nouns are then fused to form single segments. The personal 'a' is inserted before the object noun phrases containing a [+human] noun. Finally, the object segments which are [-human] are deleted. (Cf. § 3.5.1 & 4.2 Rule 13) The terminal strings are:

(45) a. Juan lo admira a él. 'John admires him.'
b. Juan la admira a ella. 'John admires her.'
c. Juan lo admira. 'John admires it.' (masc.)
d. Juan la admira. 'John admires it.' (fem.)

3.7 The Pro-Nouns Unspecified for Number and Gender

Among the pro-nouns discussed in the previous chapter there are three which are left unspecified for either gender, number or commonness. The pro-nouns are:

{-animate}   {-human}   {+human}

The {-animate} pro-noun occurs only with the definite determiners. The {+human} and {-human} pro-nouns occur only with the indefinite determiner. Their lack of specification in the gender and number categories reflects the fact that the terminal forms which derive from them are unmarked for these features. They are what are traditionally called the 'neuter' pronouns of Spanish. Their not being specified for commonness explains why they may accept restrictive modifiers (like the [+common] pro-nouns) but are fused with their determiners (like the [-common] pro-nouns). Consider the strings:

(46) a. $$\text{l-} \quad \begin{bmatrix}\text{+noun}\\ \text{+pro}\\ \text{-animate}\end{bmatrix}$$

b. $$\text{es-} \quad \begin{bmatrix}\text{+noun}\\ \text{+pro}\\ \text{-animate}\end{bmatrix}$$

c. algun- $\begin{bmatrix}+\text{noun}\\+\text{pro}\\+\text{human}\end{bmatrix}$

d. algun- $\begin{bmatrix}+\text{noun}\\+\text{pro}\\-\text{human}\end{bmatrix}$

The rule of pro-noun fusion applies to these strings as to the strings containing proper pro-nouns. The compound forms are:

(47) a. ello 'it'
b. eso 'that'
c. alguien 'someone'
d. algo 'something'

These forms can occur both in the subject and object noun phrases of Spanish. For example:

(48) a. Ello no vale la pena.
'It isn't worth the trouble.'
Le regaló ello.
'He gave it to him.'
b. Eso no vale la pena.
'That isn't worth the trouble.'
Le regaló eso.
'He gave that to him.'
c. Alguien le regaló eso.
'Someone gave that to him.'

Podían ver a alguien.
'They could see someone.'
d. Algo no vale la pena.
'Something isn't worth the trouble.'
Le regaló algo.
'He gave him something.'

Consider the strings:

(49) a. lo # lo es viej- #
b. eso # eso es viej- #
c. alguien # alguien es viej- #
d. algo # algo es viej- #

The included sentences of these noun phrases contain adjectives. These adjectives must agree with the noun that precedes them in gender and number. But as has been noted, the nouns which precede them in these instances are not specified for either gender or number. The rule which assigns gender and number features to the adjectives applies but without effect since there are no gender features to be assigned. However, the adjectives in this context invariably take their masculine singular form. This, it seems, reflects a system of marked and unmarked grammatical categories in which the feminine form is marked and the masculine form is unmarked. The marked member of a pair positively asserts the presence of some property, for example feminine gender, while the unmarked member states nothing about the presence of this property. This can be observed also in the lexical structure of Spanish. The word, mujer 'woman',is positively marked semantically as female. The word, hombre 'man', being the unmarked member of the pair, may refer to mankind in general or more specifically to the human male. (See Greenberg, 1966)

This marked / unmarked distinction is reflected in the rule which inflects adjectives for number and gender. The rule first gives the marked form of the adjective in the context of feminine gender. The unmarked form is found elsewhere, in the context of masculine gender and where no gender is specified. The form of the adjectives in (49) will be the same as in the context, masculine singular, although they are neither specifically masculine nor singular. Here they appear after the application of the relative transformation to the strings:

(50) a. lo que es viejo
'the (one) which is old'

b. eso que es viejo

'that which is old'

c. alguien que es viejo

'someone who is old'

d. algo que es viejo

'something that is old'

3.8 Some Morphophonemic Alternations

To complete this discussion it is necessary to mention some morphophonemic alternations which affect the strings. Consider the pairs of noun phrases:

(51) a.	el hombre bueno el buen hombre	'the good man'
b.	el hombre malo el mal hombre	'the bad man'

The adjectives in these noun phrases, bueno 'good' and malo 'bad', contain the morphophonemic feature [+apocope] . This feature in adjectives indicates that when the adjective occurs preceding a noun in the context masculine singular the final vowel (-o) drops. This rule also applies to determiners which are marked [+apocope] . The indefinite determiner and the indefinite article are such forms. When they occur preceding a noun they lack a final vowel, -o. When they occur with a pro-noun and the pro-noun is deleted the apocope rule does not apply and the final vowel remains. This can be observed in the pairs of sentences of (52). The first member of each pair contains a noun and the final vowel of the determiner is absent. The second member of the pair does not contain a noun and the final vowel of the determiner is present.

(52) a. Algún hombre se fue. 'Some man left.'
Alguno se fue. 'Some one left.'
b. Un hombre se fue. 'A man left.'
Uno se fue. 'One left.'

Another type of morphophonemic alternation is found in the forms of the definite article + {-animate} pronoun. The rule states simply that when this pronoun occurs alone in a noun phrase it is ello 'it' but when it precedes an included sentence, a relative clause, or an adjective it is lo. This alternation is shown in the pairs of sentences in (53). In the first member of each pair the pronoun occurs alone while in the second it occurs before an adjective.

(53) a. Pienso en ello.
'I'm thinking about it.'
Pienso en lo útil.
'I'm thinking about that which is useful.'
b. Ello siempre me sorprende.
'It always surprises me.'
Lo bueno siempre me sorprende.
'Goodness always surprises me.'

A number of rules have been mentioned and described informally in this chapter with the purpose of pointing out the variety of pronominalizations which can be described in a generative grammar which makes use of pro-nouns in underlying strings. It is interesting to notice that in large measure the pronominalizations can be accounted for with the addition of a minimal number of new rules to the grammar. The most general rules of Spanish which apply to nouns apply also to pro-nouns. These include the relativization rule, the noun modification rule, and the personal 'a' rule. The adjective agreement rule and the determiner agreement rule together with the rule of apocope account for a large number of pronominalizations where the pro-noun is deleted. Even the transformations operating upon the interrogatives, though not developed in detail here, seems to apply whether or not there is a pro-noun is fused with the determiner the structure of the underlying noun phrase is not altered. These forms are derived easily with a minimum of morphophonemic rules. The structure of the noun phrase, as it turns out, does not vary excessively when the noun it contains is a pro.

4. THE DELETION AND FUSION OF PRO-NOUNS

4.1 Pro-Noun Fusion

Up to this point the discussion of the deletion and fusion of pro-nouns with their accompanying determiners has been in terms of the results of the processes. The section which follows focuses upon the mechanisms which lie behind the fusion of a pro-noun and the conditions under which pro-noun are deleted.

Inherent in a discussion of the deletion or fusion of any given pro-noun in a particular environment will be a consideration of the nominal character of the terminal form. If, in a given noun phrase, the pro-noun is deleted, the resultant noun phrase will contain a form or forms which are interpreted by the grammar as not being nominal but simply a determiner and perhaps an adjective. If, on the other hand, the pro-noun and the determiner are morphophonemically fused, then the resultant form is interpreted as a nominal by the grammar.

One type of evidence available as to the nominal character of a pronominal form is whether or not the form may occur with a noun. The phrase structure component of the grammar generates only one noun in a noun phrase apart from the results of noun modifier transformations and conjunction rules. The noun modifier transformations will produce strings such as: el hombre médico 'the man who is a doctor' where the head noun is [+human] and the modifier noun is [+profession] (Stevens, 1966: 79). Conjunction rules produce compound noun phrases which contain conjunctions such as: Juan y María 'John and Mary'. The phrase structure component automatically rules out the possibility of noun phrases like: *Juan María *'John Mary' and *el hombre auto *'the man car', where there are two nouns in a single noun phrase. Using a criterion of this sort, este 'this' and alguna 'some' may be judged not to be nominals since they may occur with nouns: este auto 'this car' and alguna mujer 'some woman'. Forms like ella, eso, and lo might therefore be considered nominals since they may not occur with nouns. The phrases: *ella mujer *'she woman', *eso auto *'that one car', *alguien mujer *'someone woman', and *lo auto *'the one car' are unacceptable.

In Chapter 2 the necessity of establishing a proper / common noun distinction among pro-nouns was demonstrated. This was shown to be necessary in order to explain why certain pro-nouns could not accept restrictive modifiers. As it happens, it is the [-common] pro-nouns of Spanish which are fused with their accompanying determiners and thus form nominals. The pronouns,

él, ella, ellos, & ellas

all have underlying [-common] pro-nouns and none of them may occur with nouns in a single noun phrase. The determiners which may occur as the single constituents of noun phrases,

éste, ése, aquél, alguno, alguna

all have underlying [+common] pro-nouns in their noun phrases when they occur either alone or with a relative clause or adjective. They may also occur with non-pro-nouns. This is explained by requiring by a general rule or convention that [+common] pro-nouns are deleted.

On the basis of these considerations a rule may be formulated by which the fusion of pro-nouns with determiners is accomplished.

Structural Description:

[+det,...] [+noun, +pro, -common,...]

1 2

Structural Change:

$$[1] + [2] \Longrightarrow \begin{bmatrix}1\\2\end{bmatrix}$$

According to this rule, if there are two segments, one of which is marked [+det] and the other is marked [+noun, +pro, -common], they are then combined into a single segment containing all of the features of both of the input segments. Consider, for example, the following derivations:

(1) [l-, +det,+def, +art,...] [+pro, +noun, 2 gender, 1 number, +human, -common,...] ====>
[ella, +det, +def, +art, +pro, +noun, 2 gender, 1 number, +human, -common,...]

(2) [l-, +det, +def, +art,...] [+pro, +noun, 1 gender, 2 number, +human, -common,..] ===>
[ellos, +det, +def, +art, +pro, +noun, 1 gender, 2 number, +human, -common,...]

This rule expresses the intuition that forms like ella'she' and ellos 'they' are felt to be at the same time nouns and definite determiners.

The forms, alguien 'someone', algo 'something', eso 'that' and ello (lo) 'it', are similarly felt to be nominals. As was noted above, *alguien mujer *'someone woman' is not possible for the reason that two nouns are not possible in a single noun phrase. This is true of these other pronouns also. Yet alguien, algo, eso, and ello (lo) are not proper nouns since they permit restrictive modifiers, eg.

(3) alguien inteligente
'someone intelligent'

(4) algo blanco
'something white'

(5) lo que me dijiste
'what you told me'

(6) eso que me dijiste
'that which you told me'

In order to express the fact that these forms are the results of a process of fusion while at the same time not assigning incorrectly the feature, [-common], to the pro-nouns, their matrices are simply not specified for this feature. The fusion rule will then apply to strings containing these pro-nouns since their feature specifications do not contrast with the structural description of the rule. Consider the derivations:

(7) [*algun*-, +det, +indef,...] [+pro, +noun, +human,...]
===> [*alguien*, +det, +indef, +pro, +noun, +human,...]

(8) [*algun*-, +det, +indef,...] [+pro,+noun, -human,...]
===> [*algo*, +det, +indef, +pro, +noun, -human,...]

(9) [*l*-, +det, +def, +art,...] [+pro, +noun, -animate,...]
===> [*ello*, +det, +def, +art, +pro, +noun, -animate,...]

(10) [*es*-, +det, +dem, +def,...] [+pro, +noun, -animate,...] ===> [*eso*, +det, +dem, +def, +pro, +noun, -animate,...]

Alguien, *algo*, *ello* (*lo*), and *eso* are therefore the results of a fusion without being marked as proper nouns. The application of the fusion rule to these forms requires that the deletion convention for the [+common] pro-nouns not apply until after the fusion of these unmarked forms has taken place. All non-fused pro-nouns may then be deleted.

Returning to a point which was made in Chapter 2 concerning the nature of proper nouns in Spanish, it may be possible to make this fusion rule even more general. Since there is evidence, presented in Chapter 2, to support a belief that noun phrases containing proper nouns also contain definite determiners, and since normally these nouns don't occur with determiners in the terminal strings of the language, it may be that the rule operates upon all proper nouns, whether or not they are pro-nouns. In other words, noun phrases which consist of proper nouns, _Juan_ 'John' and _María_ 'Mary', have underlying strings like: _el_ _Juan_ and _la_ _María_ . The proper noun fusion rule operates upon these strings combining the definite article with the noun. This would explain the [+definite] feature which seems to be present in proper nouns. It is interesting to notice that all of the [-common] pro-nouns in Spanish occur only with the definite determiners, the definite article and the demonstratives. If the more general interpretation of the fusion rule were accepted then the same restrictions would apply to all proper nouns since, as indicated in Chapter 2, proper nouns are not compatible with indefinite determiners. The rule, at least in the case of the pro-nouns, provides a simple and highly general explanation for the instances of pro-noun fusion.

4.2 A Summary of Rules

A number of transformational and morphophonemic rules have been discussed, described and implied during the course of this presentation. Many of the rules which are necessary for the derivation of noun phrases containing pro-nouns have been well known and well established as necessary rules in the language, e.g. the relativization rule. The principal rule for pro-nouns has been discussed in § 4.1 What follows is intended to be a summary in formal rules of the transformation which have been relevant to the derivation of pro-nouns plus a presentation of the phonological rules which realize the determiners and adjectives and those rules which realize the pro-nouns which have been fused with their determiners. A number of these rules are taken from Stevens (1966) and these are marked with an asterisk to distinguish them from those rules which have been specifically formulated for and are relevant to the pro-nouns.

*1. ADJECTIVE AGREEMENT - Obligatory.

$$[+\text{adjective}] \Longrightarrow \begin{bmatrix} \text{a gender} \\ \\ \text{B number} \end{bmatrix} \ / \begin{bmatrix} +\text{noun} \\ \text{a gender} \\ \text{B number} \end{bmatrix} \ldots \underline{\qquad}$$

where Noun Copula Adj. is an S.

This rule states that an adjective agrees with the noun it follows in gender and number and applies to underlying copulative sentences. E.g. *El hombre es buen-* ---> *El hombre es bueno*.; *La mujer es buen-* ---> *La mujer es buena*. (§3.4)

*2. DETERMINER AGREEMENT - Obligatory.

$$[+\text{det}] \Longrightarrow \begin{bmatrix} \text{a gender} \\ \text{B number} \end{bmatrix} \; / \; \underline{\qquad\quad} \begin{bmatrix} +\text{noun} \\ \text{a gender} \\ \text{B number} \end{bmatrix}$$

A determiner, by this rule, agrees with the noun it precedes in gender and number. E.G. *l- hombre* ---> *el hombre* 'the man'; *l- mujer* ---> *la mujer* 'the woman'. (§3.1.1)

*3. RELATIVIZATION - Obligatory.

$$\begin{array}{llllll} \text{Structural Description:} & X & NP_1 & NP_1 & VP & Y \\ & 1 & 2 & 3 & 4 & 5 \end{array}$$

Condition: 2 = 3

Structural Change: 1 2 3 4 5 ==> 1 2 que 4 5

The relative pronoun, *que*, replaces a noun phrase in an included sentence if that noun phrase is identical to the noun phrase in the matrix sentence. E.g. *el hombre* # *el hombre es bueno* ==> *el hombre que es bueno* 'the man that is good'. (§ 3.4)

*4. NOUN MODIFICATION - Optional.

Structural Description: X NP que Cop. Adj. Y
1 2 3 4 5 6

Condition: 5 = [+adjective]

Structural Change: 1 2 3 4 5 6 ==> 1 2 5 6

This rule operates upon the output of Rule 3 if there is a copulative verb in the included sentence and the copula is followed by an adjective. The rule deletes the relative pronoun and the copula. E.g. *el hombre que es bueno* ==> *el hombre bueno* 'the good man'. (§ 3.4)

5. INTERROGATIVE - DETERMINER FUSION - Obligatory.

Given: Q = [+interrogative, +pro]

Structural Description: X Q Det. Y
1 2 3 4

Structural Change: 1 2 3 4 ==> $1 \begin{matrix}2\\3\end{matrix} 4$

Condition: 3 = [+def, +art, -pro]
or [-def, -pro]

Rule 5 was mentioned only briefly in § 3.3 . It gives at least the probable form of one rule in a more comprehensive treatment of interrogatives. It combines the interrogative morpheme with a definite article eventually giving *cuál* or *cuáles*. E.g. *Q* + *el hombre está aquí* ==> ¿*Cuál hombre está* *aquí*? 'Which man is here?' It combines the interrogative morpheme with an indefinite article eventually giving *qué* . E.g. *Q* + *un* *hombre* *está* *aquí* ===> *¿Qué* *hombre* *está* *aquí*? 'What man is here?'

*6. PERSONAL 'A' - Obligatory.

Structural Description: $\underset{1}{NP}\ \ \underset{2}{V_{[+\ 'a']}}\ \ \underset{3}{(Det)}\ \ \underset{4}{N_{[+human]}}$

Structural Change: 1 2 3 4 ==> 1 2 a 3 4

An *a* is inserted before an object noun phrase with a [+human] noun if the verb of the sentence is one of the class which requires the 'a'. E.g. *Juan* *admira* *María* ==> *Juan* *admira* *a* *María*. 'John admires Mary.'

7. INTERROGATIVE REORDERING - Obligatory.

The effect of this rule, which was merely implied in the discussions of the interrogative, places a noun phrase which has undergone Rule 5 initially in a sentence. It must occur after the personal 'a' rule since the *a* occurs also with the interrogative initially in a sentence. E.g. *María* *quiere* *a* *cuál* *hombre* ==> *¿A* *cuál* *hombre* *quiere* *María*? 'Which man does Mary love?'

8. PROCLITIC PRONOUN - Obligatory.

Structural Description:
$$\begin{array}{cccccc} X & Vb & Art. & Pro\text{-}N. & Y & W \\ 1 & 2 & 3 & 4 & 5 & 6 \end{array}$$

Structural Change: $1\ 2\ 3\ 4\ 5\ 6 \Longrightarrow 1\ L\ 2\ 3\ 4\ 5\ 6$

Condition: $3 =$ +def ; $5 = \#$; $6 \neq 5$.

A proclitic pronoun, L, is inserted before a verb in a sentence whose object noun phrase contains a definite article and a pro-noun but not an included sentence. E.g. *María quiere a él* ==> *María L quiere a él*. 'Mary loves him.' (§ 3.5.2 & 3.6.2)

9. PROCLITIC PRONOUN AGREEMENT - Obligatory.

$$L \longrightarrow \begin{bmatrix} \text{a gender} \\ \text{B number} \end{bmatrix} \; / \; \_\_\_\_ \ldots \begin{bmatrix} \text{+noun} \\ \text{a gender} \\ \text{B number} \\ \text{+pro} \end{bmatrix}$$

where *L ... Pro-N.* is a *VP*.

This rule operates within the bounds of a verb phrase and adds to the features of L those of the gender and number of the following object pro-noun. E.g. *María L quiere a él* ==> *María lo quiere a él*. 'Mary loves him.' (§ 3.5.2 & 3.6.2)

10. PRO-NOUN - DETERMINER FUSION - Obligatory.

Structural Description:

$$\underset{1}{[\text{+ det},\ldots]}\ \underset{2}{[\text{+noun, +pro, -common},\ldots]}$$

Structural Change: $[1] + [2] \Longrightarrow \begin{bmatrix} 1 \\ 2 \end{bmatrix}$

This is the principal rule of pronominalization in Spanish. It combines the features of a determiner with those of a following pro-noun if that pro-noun is marked [-common] . It applies also to pro-nouns which are unspecified for commonness. (See § 4.1) It is also at this point that the general convention operates which deletes all pro-nouns which have not been combined with determiners. E.g. *María quiere a ese Pro-N*. ==> *María quiere a ése*. 'Mary loves that one.'

11. DEFINITE ARTICLE DELETION - Obligatory.

$$[+\text{def}, +\text{art}] \Longrightarrow \emptyset \ / \ \underline{\qquad\quad} \begin{Bmatrix} \text{VP} \\ \# \end{Bmatrix}$$

A definite article is deleted if by the convention of pro-noun deletion it is left the sole constituent of a noun phrase. E.g. *María lo quiere el* ==> *María lo quiere*. 'Mary wants it.' (§ 3.3 & 3.5.2)

12. PROCLITIC PRONOUN DELETION - Optional.

$$\text{L} \dashrightarrow \emptyset \ / \ \underline{\qquad} \text{Vb}_{[+\text{object delete}]}$$

This rule deletes the proclitic object pronoun if the verb which it precedes is of the type which permits its object to be deleted. E.g. *María la canta* ==> *María canta*. 'Mary sings.' (§3.5.2)

13. PRO-NOUN REALIZATION RULES - Obligatory.

These rules operate upon the segments which are at the same time determiners and pro-nouns. They give these segments their phonological shape in a systematic way.

$$\text{(i)} \begin{bmatrix}\text{+def}\\ \text{+art}\\ \text{+pro}\\ \text{+noun}\\ \text{-common}\end{bmatrix} \dashrightarrow \begin{array}{l} \text{él / [1 gender, +human]}\\ \text{ella/ [2 gender, +human]}\\ \text{ello /[-animate]}\\ \emptyset \text{ / [-human]}\end{array}$$

The pronouns based upon the definite article in their singular forms are derived by this rule. The pronouns, él 'he' and ella 'she', are the personal pronouns derived from underlying human forms. The pronoun, ello 'it, is the pronoun derived from a [-animate] pro-noun. Where the segments are marked [-human] they are deleted. (§ 3.6)

$$\text{(ii)} \begin{Bmatrix}\text{él}\\ \text{ella}\end{Bmatrix} \dashrightarrow \begin{Bmatrix}\text{ellos}\\ \text{ellas}\end{Bmatrix} \text{ / [2 number]}$$

Rule (ii) pluralizes the personal pronouns.

$$\text{(iii) ello} \dashrightarrow \text{lo /}\underline{\quad\quad}\text{S'}$$

This rule accounts for the alternation of the {-animate} pronoun before an included sentence. E.g. Pienso en ello. 'I think about it.' but Pienso en lo bueno. 'I think about goodness.'

(iv) $$\begin{Bmatrix} \text{est-} \\ \text{es-} \\ \text{aquell-} \end{Bmatrix} \longrightarrow \begin{Bmatrix} \text{esto} \\ \text{eso} \\ \text{aquello} \end{Bmatrix} \; / \; \begin{bmatrix} \text{+pro} \\ \text{+noun} \\ \text{-animate} \end{bmatrix}$$

The demonstratives which have been fused with the {-animate} pro-noun are realized by this rule.

(v) $$\text{algun-} \longrightarrow \text{alguien} \; / \; \begin{bmatrix} \text{+pro} \\ \text{+noun} \\ \text{+human} \end{bmatrix}$$

$$\text{algo} \; / \; \begin{bmatrix} \text{+pro} \\ \text{+noun} \\ \text{-human} \end{bmatrix}$$

The forms of the indefinite pronouns are provided. Alguien 'someone' is derived from the {+human} pro-noun; algo 'something' is derived from its [-human] counterpart.

*14. PHONOLOGICAL RULES

(i) $\text{Formative}_{[\text{+art, +def, -pro, 1 gender, 1 number}]}$

$\Longrightarrow$ e + Formative

Rule (i) accounts for the masculine singular form of the definite article, el.

(ii) $\text{Formative}_{[\text{1 gender, 1 MC}]} \Longrightarrow \text{Formative} + \underline{o}$

Formatives of the first morphophonemic class (1 MC) add the suffix -o in the context [1 gender] (masculine). E.g. buen - $\longrightarrow$ bueno.

(iii) $\text{Formative}_{[+\text{apocope, 1 gender, 1 number}]} + \underline{o}$
$\Longrightarrow \text{Formative} - \underline{o}\ /\ \_\_\_ \ldots [+\text{noun}]$, where
$\_\_\_ \ldots [+\text{noun}]$ is an NP.

This is the apocope rule which deletes the final vowel of adjectives and determiners in their masculine singular when they occur before a noun. The rule operates only within a noun phrase. E.g. alguno hombre --> algún hombre 'some man'.

(iv) $\text{Formative}_{[2\text{ gender, 1MC}]} \Longrightarrow \text{Formative} + \underline{a}$
Adjectives and determiners of the first morphophonemic class add the suffix, -a , in the feminine gender. E.g. buen- ---> buena.

(v) $\text{Formative}_{[1\text{ gender, 3 MC}]} \Longrightarrow \text{Formative} + \underline{e}$
Adjectives and determiners of the third morphophonemic class add the suffix, -e, in the masculine. E.g. est- --> este.

(vi) $\text{Formative}_{[2\text{ number}]} \Longrightarrow \text{Formative} + S$
The plural suffix is added to forms which have been pluralized.

(vii) S --> s / V̆
é_____

$\emptyset$ / V̆s_____

es

The allomorphic variations of the plural suffix are given by this rule. After unstressed vowels and stressed *é* the allomorph is -*s* . E.g. *bueno*-*S* --> *buenos.* After unstressed vowel and *s* the allomorph is *zero*. E.g. *lunes*-*S* --> *lunes*. Elsewhere the suffix is -*es*. E.g. *mes*-*S* --> *meses*.

5. CONCLUSION

In considering pronominalization we are not speaking about one single process in a language. It is most likely for this reason that grammarians, traditional, structural and generative, have differed, among themselves and with each other, as to the nature of the phenomena. Generative grammar (Lees, 1961) has described the type of pronominalization which is the result of repeated identical noun phrases. The relative transformation is such a type in that it replaces a noun phrase by a relative pronoun. In Spanish, que 'that', is a relative pronoun which replaces a noun phrase in certain contexts. Consider the noun phrase:

(1) el hombre que vi
'the man who I saw'

whose underlying string is:

(2) el hombre # yo vi al hombre #
'the man # I saw the man #'

Forms like que are transformationally introduce pronouns. There are, however, pronouns which cannot be introduced in this manner. These are the subject and object personal pronouns (*él*, *ella*, *alguien*...) which occur in simple sentences and therefore cannot be the results of repeated noun phrases in included sentences. These forms are introduced into the grammar at the deepest level, the base component. These items, taken from the lexicon and placed in the pre-terminal string, are what have been herein refered to as *pro-nouns*.

These pro-nouns, as has been shown, are highly abstract structures. The requirements of recoverability in the grammar demand that the syntactic matrices of these forms be very heavily restricted. The pro-nouns in Spanish involve only features of humanness, animateness and gender. These features, furthermore, occur only singly or with one other such feature. It seems that pro-nouns have limited semantic matrices some of whose features are derived from the sentential context of the forms. Consider the sentences:

(3) El hombre está escribiendo una carta.
'The man is writing a letter.'

(4) El hombre está escribiendo.
'The man is writing.'

(5) El hombre está comiendo una cena.

'The man is eating a meal.'

(6) El hombre está comiendo.

'The man is eating.'

Sentences (3) and (5) contain non-pro-nouns in their object noun phrases. The underlying forms of sentences (4) and (6) contain pro-forms in their object noun phrases. These pro-forms have been deleted in the terminal strings. The pro-forms which have been deleted are syntactically identical - they are both non-human, 2 gender, singular and indefinite. In spite of their syntactic identity it is clear that they cannot be semantically identical. In (4) the pro-noun is semantically restricted to things which can be written, a letter, a poem, a novel, etc. In (6) the pro-noun is semantically limited to things which can be eaten, a meal, a steak, a breakfast, etc. We certainly do not wish to provide pro-nouns in the lexicon for every possible range of semantic interpretation. The alternative is to establish the convention that a pro-noun, or any pro-form, acquires its semantic features from the context of the sentence in which it occurs. Thus, by this convention, the same pro-noun occurs in (4) and (6) but this same pro-noun acquires different semantic features in each case (Katz and Postal, 1964).

In Spanish the pro-nouns are devoid of phonological matrices. The phonological structure of these forms is given by the rules in § 4.2 Rule 13. The absence of these matrices allows the grammar to produce forms which may be quite distinct phonologically according to their environments. The {-animate} pro-noun, for example, can occur in any of the following forms depending upon the determiner with which it is found:

(7) ello, esto eso, or aquello

An underlying {-animate} pro-noun may result in ello when it does not occur with an included sentence. When it occurs with an included sentence it may result in a form like lo as in lo bueno.

Basic to the theory of generative grammar is the distinction between deep and surface structures. The underlying strings and forms generated by the base component of the grammar are highly abstract and do not bear a direct relationship to the surface structures or terminal strings of a language. This is as true for pro-nouns, perhaps even more so, as it is for other units in the deep structures. The process of pronominalization is really not one process but many different processes which have in common only their operation upon pro-nouns. The relative transformation involves a type of pronominalization in that it introduces a pro-noun transformationally into the sentence string. There are other processes which operate also upon pro-nouns which have been in the string from the base component. The Spanish forms, *él* and *algo*, are described as nominals formed by the fusion of a determiner and a pro-noun. In other words these pronouns are syntactic portmanteaus. The Spanish forms, *éste* and *alguno*, are the results of the entirely different process, deletion, operating upon the pro-noun in the noun phrase though not upon the determiner. The effect is to produce noun phrases without nouns. The grammar proposed here intends to account for the fact that some pronouns are nominals while others are simply determiners. Consider the noun phrases:

(8) algún libro 'some book'

(9) algo 'something'

(10) alguno 'something'

(11) *algo libro

Noun phrase (8) contains a determiner and a noun. Noun phrase (9) also contains a determiner and a noun - though the two have been fused morphophonemically since the noun is also a pro. Noun phrase (10) does not contain a noun - only the indefinite determiner. This is the identical determiner to that which is found in noun phrase (8) save that in (10) the apocope rule has not applied because the pro-noun has been previously deleted. The final vowel of the form, therefore, remains. Noun phrase (11) is unacceptable for the simple reason that the underlying string would have to contain two nouns, a pro-noun and a non-pro-noun, in sequence without the previous application of any co-ordinating or suberdinating transformation. In traditional terms, the forms in (9) and (10) have both been called pronouns though, in fact, only (9) is a nominal. The noun phrase (9) is the result of morphophonemic fusion and (10) is the result of pro-noun deletion.

Postal (1966) suggests an analysis of English personal pronouns whose basis is that articles are not present segmentally in deep structures, but are represented as syntactic features of nouns. By this analysis every noun will contain features such as [+definite] or [-definite] ; [+demonstrative] or [-demonstrative] . Transformational rules will introduce articles preceding these nouns which correspond to the designation within the noun matrix. This leads him to describe the personal pronouns as articles and not nouns:

> "...we are led to regard him as an article whose underlying head noun (which would otherwise show up phonologically as one) has been deleted because it was +pro ..."
>
> (188)

Postal's analysis does not differ very much from the treatment of pronominalization contained in this study. He views the similarity between articles and pronouns as a process of extraction; while in the view of this paper, it is one of fusion. There is one difficulty with Postal's proposal. He seems to accord to the pro-noun in English a single phonetic or phonological structure, namely one, which must appear in the terminal string unless the pro-noun is deleted. In this study it was shown that such an assumption cannot be made for Spanish. The pro-noun in Spanish can take any number of shapes depending upon its own syntactic features and the determiners with which it occurs. The consequence of assuming a single phonological shape for a pro-noun is to limit the ability of the grammar to state in which cases the pro-noun is present and in which cases it is not. Consider the sentences in English:

(12) She appeals to me.
(13) This appeals to me.
(14) This one appeals to me.

If I understand Postal's analysis correctly, the English pro-noun occurs only in (14); in (12) and (13) it has been deleted. This analysis, it seems, obscures the distinction which this paper has tried to make clear for Spanish. This distinction is present in (12) and (13). In (12) she should be described as a nominal; not a form from which the nominal has been deleted, as Postal suggests. Sentence (12) stands in contrast to (13) where the pro-noun has, in fact, been deleted.

Pronominalization, then, is not properly viewed as a single process of replacement or of deletion but rather as the result of a number of widely differing processes which have in common their application to the underlying abstract lexical units which we have chosen to call pro-nouns. The processes of deletion, morphophonemic fusion and retention operate upon pronouns which have been introduced into the sentence string either by transformation, as in the relative clause, or have been introduced in the base component of the grammar. The great diversity and apparently anomalous character of the forms which have been traditionally called pronouns can be systematized by the recognition that there need not be any isomorphic relationship between the underlying strings of a language and the terminal representations.

REFERENCES

Bello, D. Andrés, and D. Rufino José Cuervo (1928). *Gramática de la lengua castellana*. Paris: Andres Blot, Editor.

Chomsky, Noam (1957). *Syntactic Structures*. Janua Linguarum, 4. The Hague: Mouton and Co.

__________(1964). *Current Issues in Linguistic Theory*. Janua Linguarum, Series Minor, 38. The Hague: Mouton and Co.

__________(1965). *Aspects of the Theory of Syntax*. Cambridge, Mass.: M.I.T. Press.

Gili y Gaya, Samuel (1961). *Curso superior de sintaxis española*, 8ª ed. Barcelona: Publicaciones y Ediciones Spes, S.A.

Greenberg, Joseph H. (1966). "Language Universals," *Current Trends in Linguistics*, *Vol. III.* Thomas A. Sebeok, ed. The Hague: Mouton & Co. pp. 61 - 112.

Hall, R. A., Jr. (1945). "Spanish Inflection," *Studies in Linguistics* 3.24 - 36.

Harris, Zellig S. (1957). "Co-occurrence and Transformation in Linguistic Structure," *Language*, 33, No. 3, 283 - 340.

Jespersen, Otto (1924). *Philosophy of Grammar*. London: Allen & Unwin.

Kahane, Henry R. and Anglelina Pietrangeli, eds. (1954). *Descriptive Studies in Spanish Grammar*. Illinois Studies in Language and Literature, Volume 38. Urbana: University of Illinois Press.

Katz, J. J., and P. Postal (1964). *An Integrated Theory of Linguistic Descriptions*. Cambridge, Mass.: M.I.T. Press.

Lees, Robert B. (1960a). *The Grammar of English Nominalizations*. Indiana University Research Center in Anthropology, Folklore, and Linguistics, Publication 12 (=*IJAL* 26.3.ii). Bloomington: Indiana University Press.

___________ (1960b). "A Multiply Ambiguous Adjectival Construction in English," *Language*, 36, No. 2. pp. 207 - 221.

Postal, Paul M. (1966). "The So-Called 'Pronouns' in English," *Monograph Series on Languages and Linguistics*, No. 19, ed. F. P. Dinneen, S.J. Washington, D.C.: Georgetown University Press. pp. 176 - 206.

Ramsey, Marathon Montrose (1956). *A Textbook of Modern Spanish*. Revised by Robert K. Spaulding. New York: Holt, Rinehart and Winston.

Smith, Carlota S. (1964). "Determiners and Relative Clauses in a Generative Grammar of English," *Language*, 40, No. 1. pp 37 - 52.

Stevens, Claire E. (1966). *A Characterization Spanish Nouns and Adjectives*. Studies in Linguistics and Language Learning, II. Seattle: University of Washington Press.

Stockwell, Robert P., J. Donald Bowen, and John W. Martin (1965). *The Grammatical Structures of English and Spanish*. Chicago: University of Chicago Press.

Sweet, Henry (1900). *A New English Grammar, Part I*. Oxford: The Clarendon Press.

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